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NEWS SUMMARY

GENERAL

Hope of Ulster Cabinet fades

Hopes have evaporated for agreement at the constitutional conference on a return of devolved Cabinet-style government in Northern Ireland. The talks, which continue today and resume next week, will probably narrow down to discussion about the more limited objective of a non-executive legislature, possibly backed up by a committee system.

The slim chance of success was ruled out when main Unionist delegate Ian Paisley insisted that any Cabinet be made up by the Unionists—the majority party Back Page.

BUSINESS

Golds up sharply; Sterling improves

● **GOLDS** registered substantial gains on the rising bullion price, despite late profit-taking, and the Gold Mines Index rebounded 23.4 to 334.6. Institutional interest for good-quality equities surprised dealers, and the FT 30-share index closed 10.4 up at 454.8.

● **GILTS** took a late turn for the better and the Government Securities Index edged up by 0.01 to 67.65.

● **GOLD** rose \$25 in London to close at \$670, on renewed buying interest.

● **STERLING** closed at \$2.3320, a rise of 35 points, on the announcement of higher Middle East oil prices and probable Bank of England intervention. Its trade-weighted index was 71.4 (71.6). **DOLLAR** traded within a narrow range to close at DM1.7370 (DM1.7385). Its index was 85.0 (85.1).

● **WALL STREET** was down 18.37 at 863.17 just before the close.

● **STOCK** Exchange is likely to lose its pending case before the Restrictive Practices Court, according to institutional fund managers interviewed for a study on prospects for the Securities Industry. It may mean changes in the exchange's rules. Page 23

● **JOHN NOTT**, Trade Secretary, said the Government may have to resort to "temporary protectionism" against textile imports. Page 4

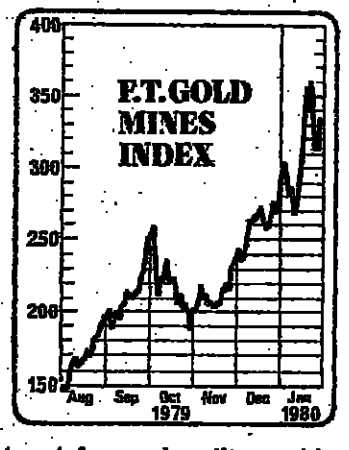
● **PRICING**, not preaching, is the foundation of the Government's policies on energy, says Mr. David Howell, Energy Secretary. Page 27

● **ACCIDENTAL** has agreed to pay £1.8m more in rates than legally required for its oil-handling terminal on the Orkney island of Flotta. Page 5

● **BRITISH RAIL** confirmed that it is examining ways of attracting private investment in its subsidiaries, as one method of overcoming cash shortages. Back Page

● **BIG** increases in the duties on imported goods in the Budget might mean only limited additional tax revenue or even diminishing returns while boosting retail prices, according to a stock-brokers' analysis. Page 27

● **BORG-WARNER** is to close its automatic transmissions plant at Letchworth, Herts., with the loss of up to 700 jobs. The company says a sharp downturn in orders is responsible. Back Page



Embassy blast

A consular official was killed and at least eight people injured when two bomb blasts ripped through the Syrian Embassy in Paris. Page 3

EEC Budget bid

THE UK's battle for cuts in its expected £1.2bn net contribution to the EEC Budget moves into its second phase today as the European Commission discusses proposals aimed at a possible solution. Back Page; Britain receives major share of EIB loans. Page 2

Fish catch agreed

EEC Fisheries Ministers made tentative moves towards restoring order to the Community's fishing policy by agreeing a total admissible catch for 1980 allied to monitoring provisions. Back Page

BBC talks fail

All BBC members of the Association of Broadcasting Staff were ordered to stop work as talks failed to settle a dispute over the new Newsnight programme. Page 7

Heart transplant

Heart transplant was given to child prodigy Nigel Olney, 35, of Leighton Buzzard, at Papworth Hospital, Cambridge. The hospital said Mr. Olney had recovered consciousness and was in a good condition.

Stern sues

Property developer William Stern, 44, claimed libel damages in the High Court against chartered accountant Jacques Beauprez for an alleged attack on his honesty and integrity.

Ships collide

Five men were killed and 30 missing after their U.S. coast guard ship collided with a tanker and sank in Tampa Bay off Florida.

Mugabe attack

Robert Mugabe, leader of the ZANU guerrilla party, was castigated as an enemy of black nationalist unity by 62 former ZANU members who returned to Rhodesia on Monday from detention in Mozambique. Page 8

Durante dies

Comedian Jimmy "Schnozle" Durante, star of films, television and Broadway musicals, died in Los Angeles, aged 86.

Briefly...

Queen and Duke of Edinburgh will pay a State visit to Italy from October 14 to 17, which will include a meeting with the Pope.

Bomb exploded outside a crowded bar in Bilbao, Spain, seconds after a parcel was thrown in the dustbin.

Paris police easily spotted two men who burgled a city clothing shop. They were wearing all the loot, including 17 jackets.

CHIEF PRICE CHANGES YESTERDAY

(Prices in pence unless otherwise indicated)

RISERS		FALLS	
Black 12% 1980	293.1	Samuel Properties	118 + 7
State Circle	338 + 12	Smiths Inds.	222 + 8
Bovril	176 + 10	Vickers	136 + 8
Caffrey	165 + 19	Wardle (B.)	34 + 5
Daily Mail A	503 + 21	BP	362 + 20
Eurocryptus	135 + 15	Shingl Amer. Gold	540 + 14
Finlay (F.)	123 + 5	Cons. Gold Fields	494 + 17
Flight Refuelling	239 + 11	East Driefontein	1121 + 11
GEC	359 + 6	General Mining	880 + 30
Hambros	328 + 16	Jo'burg Cons.	127 + 18
I.D.C.	160 + 22	Marivate	620 + 57
KCI	389 + 9	Walton	1181 + 11
Land Securities	235 + 11		
Leigh Interests	125 + 12	FALLS	
Lucas Inds.	98 + 6	Booker McConnell	278 - 12
Meyer (Mugue L.)	370 + 10	Christie-Tyler	68 - 5
Midland Bank	242 + 12	Henderson-Kentox	98 - 17
Mountainview Bels.	121 + 10	Roskill	22 - 6
Racal Elec.	241 + 10	Aran Energy	324 - 22
Reed Int.	206 + 13	Spargo's Exploration	33 - 5

Steel union leaders call off strike in private sector

BY CHRISTIAN TYLER

The Iron and Steel Trades Confederation agreed reluctantly last night to comply with the Court of Appeal's ruling that its extension of the steel strike into the private sector must be called off, and picketing of independent producers stopped.

Before last night's decision support for the action against private steelmakers remained very strong as the degree of picketing intensified. In South Wales 39 pickets were arrested after incidents outside a stockholder.

Asked last night whether his members would obey the new union instructions, Mr. Bill Sims, general secretary of the ISTC, said that his executive had acted as law-abiding citizens.

Decision

"They have even agreed to accept the law of Lord Denning. We have now done what the courts have asked us to do, and under those circumstances the responsibility will not be ours."

The union's national executive made clear that if the court's decision was overturned by the House of Lords the action in sympathy in the private sector could be reimposed.

A decision will be taken on Friday, when the executive committees of the ISTC and its ally in the strike, the National Union of Blastfurnacemen, are expected to meet again.

The Lords appeal committee will decide tomorrow whether to give the union leave to appeal, which was refused by Lord Denning, Master of the Rolls.

If leave is granted, the Lords will hear the case on Friday, and the union hopes to have a verdict the same day.

Meanwhile progress toward getting the ISTC and the Blastfurnacemen back into negotiations with the British Steel Corporation is still very slow, as the strike moves into its fifth week.

Mr. Sims and Mr. Hector Smith of the Blastfurnacemen are due to meet Mr. Len Murray, TUC general secretary, today to hear what he has to say in his role as mediator.

Mr. Sims held out little hope that Mr. Murray's report would alter the refusal of the unions to get back into negotiations alongside the smaller craft and general unions.

The outline of BSC's revised offer has been put to the principal unions and rejected by them, as insufficient to make further negotiation worthwhile.

Four Gulf states raise oil price by \$2 a barrel

BY RAY DAFTER, ENERGY EDITOR

FOUR Gulf states have followed Saudi Arabia's lead and raised their crude oil prices by about \$2 a barrel. The oil industry was concerned last night that the move could trigger a more widespread round of price increases.

Kuwait, Iraq, the United Arab Emirates, and Qatar have each added \$2 a barrel to the price of their main crude oil. This follows Saudi Arabia's decision on Monday to increase its Arab light marker crude from \$24 to \$26 a barrel. In all five cases, the increases will be backdated to January 1.

Saudi Arabia's move was seen in the industry as an attempt to close the pricing gap between its own oil and similar crudes produced by other Gulf states. But those differentials have now been restored, much to the surprise of major oil companies, which had felt it unlikely that other producers would follow the Saudi lead.

There was concern that there could now be another bout of price leaping which was so prevalent at the end of last year.

There was speculation in the industry that Venezuela and Indonesia—regarded to be among the pricing moderates within the Organisation of Petroleum Exporting Countries—might adjust their prices in line with those of the Gulf states.

Oil industry executives questioned whether the more militant pricing members of OPEC—Libya, Algeria, Nigeria and Iran—could justify similar increases for their crude. Crude oil, from these four exporters is already selling at up to \$34.74 a barrel under contract arrangements. It was felt in the industry that the so-called hawks might be discouraged by a slackening of demand in the open spot market, where prices have fallen by several dollars a barrel in recent weeks.

As a result of yesterday's announcement the United Arab Emirates Murban crude costs about \$29.80 a barrel, and Kuwait's 31 degrees API crude \$27.50.

Sheikh Ali Khalifa Al-Sabah, Kuwait's oil minister, said the increase was "in conformity with the principle of equity and fairness in pricing among oil producing states."

It was expected that the new round of increases could add 10p to the wholesale price of oil products if applied across-the-board.

Three of the five producers which have now raised their prices—Saudi Arabia, Kuwait, Iraq—are the main sources of Britain's imported oil. In the first 10 months of 1979 they accounted for 26m tonnes of supplies—about 54 per cent of total imports.

Editorial comment, Page 18
U.S. oil company profits, Page 25

LATEST REPRESENTATIVE OIL PRICES

	1979 average production (b/d)	Price per barrel
Saudi Arabia	9,25	26.00
Iraq	2,9	28.50
Kuwait	2,2	27.50
Iran	3,7	28.80*
Abu Dhabi	1,45	29.40*
Indonesia	1,6	27.50
Venezuela	2,33	28.75
Libya	2,05	34.72*
Nigeria	2,37	29.99
UK	1,57	29.75

* Estimated.
† Includes \$1.72 retroactivity charge until March 31, 1980.
Source: Oil & Gas Journal, Petroleum Intelligence Weekly and industry estimates

Lloyd's group sues over leasing

BY JOHN MOORE

LLOYD'S OF LONDON underwriters and 16 insurance companies, including the Guardian Royal Exchange, are seeking a court ruling that £14m (£8.2m) worth of computer leasing insurance contracts are tainted by \$2m worth of bribes.

The action has been started in the U.S. district court in Dallas, Texas. It is one of many legal actions in which the Lloyd's market and insurers have been involved following a disastrous series of claims on computer leasing insurance, expected to produce the largest losses Lloyd's has experienced.

The latest official estimate of the amount the market could lose is \$156m.

Lloyd's underwriters are suing Southwestern Bell Telephone; InterCap Leasing Corporation; InterCap Corporation; B and W Capital Corporation; Richard Reid Wadsworth, Jr.; Irven Eugene Barlow.

The underwriters are seeking a jury trial for the action, which is to be vigorously contested. The action alleges that InterCap and its principal Messrs. Barlow and Wadsworth and others acting in concert, paid \$2m of bribes to Mr. Raymond Acker, an authorised agent of Southwestern Bell.

Computer leasing insurance contracts were arranged by leasing companies to protect themselves against the early termination of computer leases by their customers before the contract date. If the customers did terminate early, the companies could claim on insurances and cover obligations to financial backers.

When new International Business Machines' models came on the market in 1978, leasing companies found that customers

Alfred Herbert to trim 700 jobs

By Hazel Duffy, Industrial Correspondent

ALFRED HERBERT, the State-owned machine tool group, announced a major rationalisation programme yesterday which will involve the loss of 700 jobs, most of them in Coventry, and the disposal of some subsidiary companies in the future.

The aim is to concentrate future production on a range of advanced technology machine tools in a sector which constitutes the only growth sector in the machine tool industry.

The National Enterprise Board, which owns Alfred Herbert, made it clear to the company's Board some months ago that it could not expect any more money. In the five years since Herbert was rescued by the State, it has received £43m in public money, £18m of it to pay off pre-nationalisation debts.

Discussions with representatives of the work force about the programme have already begun. The Edgwick plant in Coventry, which will be the focal point for production of the advanced technology machine tools, will lose 200 jobs. Nearly 300 more jobs in Coventry, at Red Lane and Herbert's head office, will also disappear. Overall, the Herbert group has 4,500 employees compared with 12,000 in the late 1960s.

Mr. Peter Rippon, who succeeded Sir John Buckley as chairman of Herbert last autumn, said yesterday: "The programme will re-create the sort of company which Herbert was many years ago, when it was well-known for its high technology machine tools."

The plan will slim down several parts of Herbert, including the de-centralisation of marketing, and gradually dispose of activities which are peripheral to the main business of machine tools. There will also be some re-organisation in overseas companies.

Mr. Rippon admitted that the programme represents a last chance. "Without it, Herbert would be bust, but I think we can keep going as long as we do not suffer severe disruption from strikes by our own employees or outside the group."

He does not anticipate problems with the Herbert workers in implementing the programme. The minimum statutory redundancy payments will cost about £1m. Mr. Rippon did not say whether these will be topped up.

News Analysis, Page 6

Diplomats escape

SIX U.S. consular staff hiding in the Canadian embassy in Tehran since the U.S. embassy was seized last November, were smuggled out of the country on Monday.

The Americans left Iran on Canadian diplomatic passports. A U.S. official in Washington said the operation was carried out under the cover of a "temporary withdrawal" of Canadian personnel and closing of the embassy because of chaotic conditions in Iran.

Mr. Sadegh Ghotbzadeh, Iranian Foreign Minister, when told of the escapes, said: "I don't know anything about this."

Iran softens line on banks

BY FRANCIS CHILES, MICHAEL LAFFERTY AND ANDREW WHITLEY

IRAN HAS been presenting a more conciliatory and positive attitude in its dealings with European banks over the past few weeks. One of the clearest signs of this change of heart was the decision taken earlier this month to renew a substantial dollar deposit with Barclays Bank, London.

The renewal with Barclays is being regarded by leading Western bankers as a significant gesture toward the European banking community, both on banking and political grounds. Just before Christmas the Iranians had notified the major London banks that they wished to withdraw their deposits from London for fear of a freeze following the possibility of UN sanctions requested by the U.S.

Mr. Abol Hassan Ban-Sadr, Iran's President-elect, said immediately after his victory at the polls last weekend that he would work towards closer economic ties with Europe. Mr. Ali Reza Nowbari, the Governor of the Iranian central bank, is known to be a close associate of the President-elect and may well have already been putting his views into effect.

London banks seem to expect that the Iranians will go on rolling over existing deposits as they become due for repayment. The big clearing banks had previously refused to accede to Iranian requests that deposits should be unwound and/or transferred to the credit of other countries' banks. The London banks took the view that deposits would only be repaid as they became due.

During the past few weeks, however, Iran has been channeling new deposits to leading Western European banks, particularly French and foreign banks in Paris. These deposits represent Iran's income from foreign oil sales which in the past would have been handled by Chase Manhattan Bank of New York. Most of the funds have been in U.S. dollars, although a small measure of diversification has, according to some bankers, taken place. No new deposits are known to have been placed locally with foreign branches of U.S. banks. Bankers in London and other European financial centres believe that substantial Iranian deposits are also being placed in the international money market through the Banque Centrale d'Algerie and the Central Bank of Libya. Both of these countries are known to be sympathetic to Iran's new Islamic regime. Mr. Nowbari recently paid a visit to Algeria during which Iran's financial predicament following the U.S. freeze of its assets would have been discussed.

Mr. Nowbari said in Tehran yesterday that Iran was prepared to allow U.S. banks to offset outstanding debts against frozen deposits, provided they had court permission to do so. This represents another concession to banking opinion as Iran had sought to challenge all such off-setting moves through its own court action.

Bankers in London involved with Iran feel a growing return of confidence in Iran's financial responsibility. The Iranian central bank has notified a British clearing bank that it owed money by Iranian institutions nationalised last year that it would honour their debts.

Mr. Nowbari said yesterday that Iran will compensate foreign banks for their lost stakes in ventures absorbed into the newly-nationalised banking system. He also said that Iran would honour those debts contracted by the previous Government, as well as those which carried a Government guarantee.

Senior UK bankers said yesterday that European banks were finding it difficult to refuse additional Iranian deposits, particularly because the terms offered were so attractive. They revealed, however, that the British clearing banks had been forced to turn down part of the additional Iranian U.S. dollar deposits in the immediate aftermath of the U.S. freeze to preserve prudent balance-sheet ratios.

Iran banking, Page 26

NB

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EUROPEAN NEWS

Benn's blast blows British diplomatic cool in Brussels

BY JOHN WYLES IN BRUSSELS

THE BRITISH diplomat's mask of imperturbability slipped a little here yesterday as Mr. Anthony's Wedgwood Benn's suggestion that "many, if not most, members of the Foreign Office had become a species of Eurocrat wrapped in a Union Jack".

Reports of Mr. Benn's lecture in London on the role of civil servants caused much spluttering over morning

coffee at the UK's representation in a nondescript office block opposite the Berlaymont, the Commission's headquarters.

Printable reaction to his suggestion that members of the FO were "transferring their allegiance from the United Kingdom to the European Community" ranged from "nonsense" to "utterly ridiculous".

Generally, the diplomats felt deserving of a more generous understanding of the efforts expended and diplomatic bruises suffered in their efforts to promote and defend British interests here.

But they do understand how Mr. Benn might have arrived at a "misguided" conclusion which conveniently served a political argument. The Foreign Office is the

department responsible for defending and ensuring compliance with Britain's treaty obligations around the world and this inevitably leads to a certain nagging of home departments about what they can or cannot do in their relations with Brussels.

It also often leads to a recommendation of what they should do since, it is argued here, the Foreign Office must

take the broader view of UK interests and sometimes press for concessions in one area in order to make gains elsewhere.

"If the Civil Service has gained in power, then it is the fault of Benn and his friends constantly pushing forward the limits of government," said one diplomat, discarding all pretence of imperturbability.

£690m to rescue Belgium's steel sector

A total of Bfr 44bn (£690m) is to be pumped into Belgium's steel industry over the next five years in an attempt to restore its profitability, Reuter reports from Brussels.

The plan, announced by Mr. Willem Fraeyn, chairman of the steel board, yesterday, was approved by the Government, trade unions and employers on Monday night.

The unions have agreed to a reduction of several thousands in the workforce between now and 1990, through early retirement and natural wastage. About half the Bfr 44bn is to go to Belgium's biggest steel company, Cockerill, which will shed 4,000 jobs, more than a third of its workforce.

Moscow expels envoy

The Soviet Union has ordered Mr. Jim Weir, New Zealand's ambassador to Moscow, to leave within a few days, Mr. Brian Talbot, the acting Prime Minister, said yesterday. Reuter reports from Wellington.

The Kremlin has also withdrawn its approval of his successor, Mr. Roger Perren, he said. New Zealand last week expelled Mr. Viktor Sofsky, the Soviet ambassador, saying he was personally involved in the transfer of Soviet funds to New Zealand's pro-Moscow Socialist Unity Party.

PLO in Athens

The Greek Government has agreed in principle to the establishment of a Palestine Liberation Organisation office in Athens, writes our Athens correspondent. An official statement made at the end of a visit to the Greek capital by head of the PLO's political department.

Italian killing

A senior official of a petrochemicals company yesterday became the sixth victim of Italy's extreme left-wing guerrilla violence this year, Reuter reports from Venice. He was Sig. Silvio Gori, 48, technical manager at the Porto Marghera plant of the Montedison chemical group. Sig. Gori was shot dead as he left home for work.

Games boycott threat

Norway's Olympic Committee has warned that Norwegian athletes may boycott the Moscow Olympics, writes Fay Gjester in Oslo. The Russian intervention in Afghanistan, and the banishment of Soviet dissidents, had "created strong reactions in Norwegian sporting circles," the committee said.

VW wage talks

Negotiations over a 10.2 per cent pay claim by Volkswagen's 116,000 workers in West Germany have been adjourned until February 5, a VW spokesman told Reuter in Koenigs-lutter.

Cossiga in London

Sig. Francesco Cossiga, the Italian Prime Minister, arrived in London yesterday for 24 hours of talks with the British Government. Sig. Cossiga is occupying the presidency of the EEC and Mrs. Margaret Thatcher, the British Prime Minister, is expected to concentrate on the issue of British contributions to the EEC budget. However, the implications of the invasion of Afghanistan were due to be raised.

Danish trade gap

Denmark's trade deficit widened in December to a preliminary estimate of £250m from November's Dkr 1.72bn and Dkr 1.22bn in December 1978, Reuter reports from Copenhagen.

U.S. grain embargo may hurt Europe says Bonn Minister

BY ROGER BOYES IN BONN

A WEST GERMAN Minister has warned that certain economic sanctions against the Soviet Union could prove to be a double-edged weapon for Europe.

Herr Egon Franke, Minister for intra-German Affairs, has declared that the U.S. grain embargo against the Soviet Union will significantly hit the East German economy and could thus have serious repercussions on trade between West and East Germany.

Tension between East and West and the use of sanctions "would certainly undermine the already unstable situation in some East European countries, including East Germany," Herr Franke said in a speech to the West German farmers' association.

Most of the 3m-4m tonnes of grain that East Germany imports annually comes from the U.S. via the Soviet Union. Customs will affect food grain supplies, leading to a reduction in livestock and probable meat shortages, as well as grain for use in bread and other foodstuffs. U.S. moves to restrict Soviet fishing could also affect basic supplies of protein food.

All of this is likely to have an impact on trade with West Germany, the Minister made clear. Bonn imports 350,000 tonnes of grain and some 50,000 tonnes of meat annually from East Germany.

The West European dilemma—how to give convincing support for the U.S. in the wake of the Afghanistan invasion, while still maintaining vital contacts with Eastern Europe—was



Herr Franke: Fearful for German relations

expected to be one of the key issues in private discussions between Herr Helmut Schmidt, the Chancellor, an leading academics and politicians including Dr. Henry Kissinger, the former U.S. Secretary of State, and Mr. Edward Heath, the former British Premier. Mr. Lee Kuan Yew, the Singapore Premier, also took part.

In an interview before the meeting, Dr. Kissinger emphasized that West Germany should not be expected to supply troops for any future NATO task-force aimed at preventing crises outside Europe. Germany's contribution should be economic rather than military and there should be a fair distribution of roles within the Alliance should such a task-force be established.

Turkey negotiating \$190m bridging loan from banks

BY OUR FOREIGN STAFF

UNION BANK of Switzerland and Citibank are negotiating to provide a \$190m one-month bridging loan to the Turkish Government, according to bankers in Turkey.

The Turks are seeking the loan until funds totalling about \$220m which are due from the International Monetary Fund (IMF) become available. The rate discussed is 14.5 per cent.

Last July Turkey reached a stand-by agreement with the IMF for 250m SDR (£145m). The second draw down was due in November but had been blocked—because until last week the Turkish Government had not taken the measures necessary to keep close to the targets set out in the original letter of intent.

The IMF has indicated that it will now allow the second draw down, though for technical reasons the money will not be available until the Executive Board of the IMF meets next month.

Arranging the bridging loan has proved a complex mechanical process, but reports from Ankara say that this is being completed.

According to one report the IMF money to be made available is made up of \$82.4m under the supplementary financing facility, the so-called Wirtgen Fund, and about \$130m under normal credit tranches.

Once Turkey's relations with the IMF are formally corrected Turkey will be able to draw down on other loans signed last year.

The fall of the Ecevit Government and the political problems of the new Demirel Government had delayed the economic package necessary to keep Turkey close to its original letter of intent, but the measures were finally announced last week.

Iceland leader threatens non-parliamentary rule

BY JON MAGNUSON

DR. KRISTJAN ELDIARN, the Icelandic President, has threatened to form a non-parliamentary government if the country's political leaders cannot agree on a power-sharing system within the next 10 to 12 days.

Iceland has faced a series of political crises since the autumn, when the three party left-wing coalition Government collapsed over economic issues. Leaders of the four main political parties have since taken turns to try to form a majority government without success.

Latent to try was Mr. Benedikt Grondal, the leader of the Social Democrats and the present Prime Minister of the minority caretaker Government, but his attempts were no more successful than the others.

In the past two days Dr. Eldjarn has talked privately with the political leaders and has followed up the discussions with an ultimatum that if they do not form a Government to end the crisis within the next few days, he would.

Dr. Eldjarn has indicated that his government would consist of bankers and Government officials. It is known, however, that the political leaders are strongly against a non-parliamentary government.

Petrol up again in W. Germany

BY ROGER BOYES IN BONN

TWO LEADING West German oil companies have announced a further rise in the price of petrol—the second in 10 days. Esso's West German subsidiary and Chevron Germany both stress also that these increases do not take account of the latest rise in the price of crude from Saudi Arabia, West Germany's most important supplier.

The moves come amid mounting criticism from energy-dependent industries about the pricing policies of the oil companies. The chemical industry this week has been particularly critical of increases in the price of naphtha which, according to Dr. Karl Walmser, head of the Chemicals Federation, seems to have lost touch with the actual increases in the cost of crude.

The latest petrol price increases roughly align Esso and Chevron with the rest of the market, though Dr. Wolfgang Oehme, head of Esso Germany, says that his company's petrol will probably be more costly than that of Aral and BP.

Esso announced a rise of 4 pfennigs per litre last week which was somewhat below the 67 pfennigs per litre (on four star and regular) declared at the same time by Deutsche Shell. Chevron Deutschland, which last week increased its petrol prices by 5 pfennigs, is pushing up its price by a further 3 pfennigs a litre from the end of this month. Esso, which has not disclosed the amount involved, will also raise its prices at the weekend.

All the oil companies stress

that their profits amount to only 1-2 pfennigs per litre and that much of their income is being ploughed back into projects which benefit the economy as a whole. Deutsche Shell, the West German subsidiary of the Royal Dutch-Shell group, this week announced plans for a DM 500m (£130m) catalytic heavy oil conversion plant which will create 100 jobs and Esso is also planning capital expenditure of DM 600m in 1980.

West German petrol prices—four star will cost about DM 1.15 per litre (about £1.33 per gallon) by the end of the week—are well above those in Britain but are still cheaper than in most EEC countries and Switzerland.

French step up coal investment

BY TERRY DODSWORTH IN PARIS

THE NATIONALISED French coal group, Charbonnages de France, is embarking on a programme of heavy investment aimed at checking the industry's decline in France and increasing its overseas production interests.

This change in direction for Charbonnages follows a Government decision to encourage the

role of coal in diversifying energy sources. Electricity production from coal is being stepped up steadily, and will be increased still further by a new Ffr 2.5bn (£280m) coal-fired power station which has just been ordered, for commissioning in 1985.

Charbonnages is aiming to raise Ffr 1bn for its development projects with the issue in the next few days of a 15-year

bond at an interest rate of 12.6 per cent. But the group will also continue to rely for part of its financing on state subsidies, which reached Ffr 2.3bn last year, and are expected to amount to more than Ffr 2bn this year.

Overseas, the group is aiming to sign a deal this week which will give it a 5 per cent stake in a Canadian coal mine in British Columbia.

Unions split over Soviet invasion

BY DAVID WHITE IN PARIS

CONTRAST OVER the French Communist party's pro-Soviet position on Afghanistan has split the union movement at a time when it is trying to step up joint action against the Government's economic policy.

A meeting yesterday evening between the heads of the two biggest unions, M. Georges Seguy, Communist leader of the CGT, and M. Edmond Maire, Socialist-leaning leader of the CFDT, was overshadowed by the issue.

The two men agreed in September on a limited joint programme of protests and strikes. But their joint front on issues such as the reduction of working hours has become bogged down once more in political differences.

M. Maire has accused the Communist party, in which M.

Seguy is one of the principal figures, of "ruining for a long time the possibility of a united Left in France."

At a meeting of the CFDT's national committee he said that the unions would seek ways of working together on immediate industrial issues, but that their co-operation would no longer be based on broader aspirations.

The CGT's attitude on Afghanistan, he said, was a fundamental obstacle to union action.

A CGT mission, returning from a week's visit to Kabul, said that Afghan workers approved of the Soviet intervention and that most people were "going about their normal business" and were "satisfied with the change in regime."

The Interior Ministry in Kabul had told them that Soviet

troops had not participated in fighting against rebels and would not do so. Comparing the previous Amin government to Pol Pot's Khmer Rouge regime in Kampuchea, the CGT envoys said a Soviet withdrawal would create a grave danger for the country.

M. Maire's sharp anti-Communist statements were echoed by M. André Henry, leader of the powerful teachers union, the FEN, which has a large Communist minority.

Speaking at the union's congress in Toulouse, M. Henry said that, by backing Moscow over Afghanistan, the Communists threatened "to destroy what might have remained of the Left's hopes" after the latter's demoralising election defeat two years ago.

Spain urges new hotel price system

By Robert Graham in Madrid

THE SPANISH Government is encouraging hotel owners to adopt a two-tier price system this year differentiating sharply between low and high seasons.

In the low and medium season, prices are expected to be pegged at or near 1979 levels. While for the July and August peak months prices will rise around 15 per cent. The Ministry of Commerce and Tourism is advising hoteliers against pushing prices during these two months above the annual inflation rate.

The new approach aims to establish some order without interfering too widely with the free market pricing initiated last year. At the same time, the Government wants to redistribute the flow of tourists and ease pressure on the two peak months.

By affectively penalising people who wish to holiday in July and August, the hope is that travel agencies will point out the advantages of visiting Spain during off-peak months.

Last year, according to figures just released, 38.9m people visited Spain—1m less than 1978. The figure includes emigrant Spaniards holidaying in Spain and if this is excluded the drop becomes more marked.

The fall in visits was attributed in part to increased prices, which in some instances rose over 40 per cent. Against this, tourist earnings rose to £445m to just over £2.7bn in the first 11 months last year.

A feature was the increase in the number of Spaniards holidaying abroad. Foreign currency purchases by Spaniards for travel abroad rose 68 per cent to £382m in the first 11 months last year, when 18.8m Spaniards went abroad, although 8.5m of these left for less than 24 hours, crossing into Andorra to take advantage of its duty-free status. The net balance of tourist earnings in the first 11 months was 13 per cent up, at £2.3bn.

Officials have pointed out that until last year Spain's net tourist earnings exceeded 60 per cent to the purchase of crude oil. The trend has been reversed and now net tourist earnings will only cover half the oil bill.

Europe's unions chip away at the 40-hour working week

BY BRIAN GROOM

WORKING TIME IN THE EEC

Hours by collective agreement 1979	Actual weekly hours (industry) 1977	% workers doing 45 hours or more 1977	Weeks annual holiday 1979*
Belgium	40	37.1	4
Denmark	40	54	5
W. Germany	40	42.1	12.7
France	40	41.4	25.2
Ireland	40	42.7	20.3
Italy	36-40	41.1	15.2
Luxembourg	36-40	38	11.4
Netherlands	40	41.1	11.4
Britain	37.5-40	42.3	18.4

* By legislation or collective agreement
† Approx.

Source: ETUC, EEC, ILO

FEW DEMANDS provoke such stiff resistance from employers as those for a 35-hour or 36-hour week. Since the European Trade Union Confederation's (ETUC) executive settled on this aim in 1977, hopes have been blighted on both sides in a few, well publicised battles.

The 18-nation confederation's current campaign, launched last May, for a 10 per cent cut in working time without loss of pay makes clear there are other means which can help towards it: annual holidays can be extended to six weeks, the right to a full pension achieved at 60, or the school leaving age raised to 16 where it is lower and leave for vocational training and further education extended.

Not all union federations push hard for the shorter week, though in reality the average is nearer 37. Even so, the unions (and employers) last year rejected a government

package which would have cut the official week to the long-desired 36 hours by 1982 and made many companies hire 1 per cent more workers a year for two years.

The unions would not agree to a wage freeze in real terms which was part of the new law. Unions are trying to cut hours in piecemeal negotiations, a tripartite "declaration of intent" which promises a maximum 36-hour week by the end of 1981.

Mr. Terry Duffy, president of Britain's Amalgamated Union of Engineering Workers, was applauded by the International Metalworkers' Foundation last year after 15m UK engineering workers won a 35-hour week from November, 1981.

In Italy many workers in the public sector and in banks, insurance, telecommunications and transport have average hours below 40. Last year's wage round also brought cuts in working time for metal, textile, building and chemical workers.

The European employers' most celebrated success came early in 1979, when a six-and-a-half week steel strike by IG Metall in West Germany ended without a "first step" towards

a general 35-hour week being conceded, although extra holidays and free shifts were won. This helped Dutch employers beat off a similar claim by metalworkers three months later.

If, as many unions claim, unemployment is the main catalyst in their campaign, a predicted rise of 700,000 jobs this year in the EEC will keep up the pressure.

A few developments are already under way in 1980. In France, talks between unions and employers on working

hours broke down early in January after 20 months of discussion, adding that even if hours were reduced uniformly in Europe there would still be competition from such countries as Japan and the U.S.

In the Netherlands last year, metal sector employers (and others) argued with some success, that, as their counterparts in West Germany, the Netherlands' largest trading partner, had not conceded a shorter week, it would be suicidal for Dutch industry to go it alone.

Most unions have pursued reduced hours as a means of

improving progress reports on the campaign for reduced working time. One of the three chemical industry unions has now joined the queue.

Moves in the EEC towards a Community policy on annual working hours have, however, been too cautious for the Confederation, which complained last October that the European Commission's paper on the subject was "largely inadequate".

The ETUC wants agreement across Europe on reducing hours, to counter employers' arguments that concessions would damage their own country's competitiveness.

Employers use the competition argument in most cases, adding that even if hours were reduced uniformly in Europe there would still be competition from such countries as Japan and the U.S.

In the Netherlands last year, metal sector employers (and others) argued with some success, that, as their counterparts in West Germany, the Netherlands' largest trading partner, had not conceded a shorter week, it would be suicidal for Dutch industry to go it alone.

Most unions have pursued reduced hours as a means of

dealing with unemployment, and in the long term, with the effect of new technology. But employers in most countries have argued that damage to competitiveness could wipe out employment gains and even, in some cases, put more on the dole. Shortages of, rights workers make it impossible to fill the vacancies, the employers say.

Unions are sensitive to the charge that reduced nominal hours increase overtime. Actual hours worked, they admit, have tended to come down more slowly than nominal hours, especially since 1974.

Figures are not widely to be trusted because they are calculated in different ways in different countries, but the European Trade Union Institute has been convinced that the trend between 1975 and 1977 actual hours appear even to have increased in Ireland, West Germany and Britain. Consequently many federations seek similar limits on overtime.

Branches of the standard 40-hour week have taken place in some sectors in some countries, the unions say, and the skies have not fallen in. They also point out that reduced hours actually encourage employers

to invest in new technology, and that workers are themselves more efficient in a short working day. But if productivity increased greatly when hours were reduced, then obviously not so many new jobs would be created.

Some federations, mainly where unemployment is low, seek a cut simply because more leisure is desired. Automation in the past has produced monotonous production line jobs and increased the desire for more leisure time, which in turn has created the need for more automation.

New technology which aims to cut out routine tasks may break this cycle, but it is difficult to see the trend of expectations being halted.

The demand for reduced hours is a hardy perennial. The very first convention adopted by the International Labour Organisation in 1919 set the goal of a 48-hour week. Even if progress goes slowly, it seems certain to be made on holidays, retirement and perhaps annual hours. Their economic impact will depend on whether general improvements in productivity can absorb them.

Denmark postpones N-power

By William Duffell in Stockholm

THE MINORITY Social-Democrat Government in Denmark has decided to postpone indefinitely the introduction of nuclear power.

The decision, first approved in the Social Democrat parliamentary group and then by the Government's planning committee, was taken on the initiative of Mr. Anker Joergensen, the Prime Minister.

It departs from an agreement the Social Democrats made with their former coalition partners, the Liberals, in August last year to re-examine the nuclear issue this year and possibly to put the matter to a national referendum in 1981.

It has aroused strong complaints from the Liberals and Conservatives, but Mr. Joergensen appears to have a secure majority for his new non-nuclear policy in the Folketing (parliament).

Nuclear energy was one of the four primary fuel sources included in the long-term energy policy tabled by the Government in 1976. The others were oil, dependence on which was to be reduced, natural gas from the North Sea and coal.

The Social Democrats found several reasons for their decision last week to drop the nuclear alternative but among the strongest was undoubtedly the resurgence of anti-nuclear sentiment among the Danish public after the accident last year at the Three Mile Island reactor in the U.S.

Moreover, oil and gas from the Danish part of the North Sea is now expected to provide some 30 per cent of the country's energy requirements by the second half of this decade.

Angola move angers Lisbon

By Jimmy Burns in Lisbon

PORTUGAL'S relations with her former colony Angola have deteriorated following the Angolan government's decision to nationalise remaining Portuguese-owned shares in the Angolan diamond company Diamang.

In a strongly-worded statement the Portuguese centre right government yesterday accused the Angolan authorities of creating "a new dispute at a time when broad prospects are opening up for co-operation."

The Portuguese government has retaliated by nationalising Angolan government shares in the Portuguese Dialap diamond cutting company in Lisbon.

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Russia fails to win Syrian support for Afghan action

BY OUR FOREIGN STAFF

RUSSIAN hopes of a diplomatic gain in the Arab world to offset the growing chorus of protest against the invasion of Afghanistan were dashed yesterday when Mr. Andrei Gromyko, the Soviet Foreign Minister, left Damascus empty-handed at the end of a three-day visit.

Mr. Gromyko spent five hours with President Hafez Assad yesterday, but clearly failed to secure the Syrian leader's open backing for the Soviet move.

This leaves the Soviet Union with only the small Marxist outpost of South Yemen supporting the invasion of Afghanistan among the states of the Middle East.

Mr. Gromyko's failure to gain Syrian support reinforces the embarrassment caused by the condemnation of the Soviet invasion at the Islamabad Conference of Islamic states, which was strongly supported by the Arab countries.

Mr. Gromyko also underscores the fact that the Soviet Union has failed over a number of years to get any substantive return for its considerable political, economic and military investment in the Arab world.



President Assad—a threatened regime

Mr. Gromyko is nevertheless reported to have confirmed that the Soviet Union is willing to increase both the level and quality of its military aid to Syria as part of the two countries' joint opposition to the U.S.-backed peace treaty between Israel and Egypt.

President Assad is faced with a delicate situation in asking for Soviet support at this time. His 10-year-old regime is being increasingly undermined by Islamic fundamentalists and members of the majority Sunni sect, who see their formerly predominant position in Syria being eroded.

A number of Soviet technicians were recently attacked and killed in Syria. The government blamed the deaths on the extremist Muslim Brotherhood, who have also been accused of a number of other killings, including the massacre of over 50 army cadets in Aleppo last year.

On the other hand the Camp David peace treaty has taken the steam out of Arab opposition to Israel and left Syria increasingly isolated. President Assad undoubtedly has misgivings about relying too heavily on Russian support. But Syria's continued military commitment in the Lebanon and its economic problems at home may be pushing the Syrian leader in a direction in which he might otherwise not wish to go.

Israelis reject autonomy scheme

By David Lannon in Tel Aviv

ISRAELI yesterday rejected the Egyptian plan for Palestinian autonomy on the West Bank of the Jordan and in the Gaza Strip during a meeting of working groups from the two countries. Dr. Haim Kibersky, head of the Israeli team, denounced the Egyptian proposal as a model for a Palestinian state.

As Egypt rejected the Israeli model when it was tabled two weeks ago, both sides are now looking to Mr. Sol Linowitz, the U.S. Middle East envoy, to break the deadlock when the full ministerial autonomy teams meet here tomorrow.

Mr. Linowitz arrived in Tel Aviv from Cairo yesterday. He is to meet with Mr. Menachem Begin, the Prime Minister, and other senior Ministers.

On arrival, the envoy said he was convinced that there would be real progress in the negotiations despite the difficulties. U.S. officials said that their country would be playing a more active role in the talks and had started presenting its own ideas to the sides which should speed up the discussions.

The mayors of towns on the West Bank announced yesterday that they would not meet Mr. Linowitz because they reject the whole autonomy concept. But the mayor of Gaza, who recently met Mr. Yasser Arafat, the leader of the PLO, said that he might be willing to meet the U.S. envoy.

Meanwhile, Israeli families yesterday began evacuating the controversial Eilon Moreh settlement on the West Bank. They are moving to a new site a few miles away.

Islamic summit treads delicate path

BY RICHARD JOHNS, MIDDLE EAST EDITOR

THE first extraordinary meeting of Islamic states in a decade has ended with a delicate compromise which condemns the Soviet incursion into Afghanistan but carefully avoids a fundamental commitment to either superpower.

The conference, called initially to discuss the month-old invasion of Afghanistan, soon broadened to cover a range of major issues of vital concern to the main participants.

The hard-line Arab states present used the occasion to pursue their unrelenting campaign against the U.S.-sponsored peace treaty between Israel and Egypt.

Iran, predictably, concentrated its efforts on pursuing its own obsessive preoccupation with American sanctions aimed at securing the release of the hostages at the U.S. Embassy in Tehran.

In the end the states present were able to forge an alliance of interests based on the common perception that the Afghanistan crisis could not be treated in isolation and that the two superpowers—so far as the Third World is concerned—were in the dock before the same tribunal.

The final outcome reflects hard-fought exchanges in which condemnation of the Soviet

Union and any measures taken against it are counterbalanced by warnings to the U.S. over its own role in the Middle East.

The scales eventually weighed down heavily against the Soviet Union and the U.S. emerged relatively unscathed. The result could be seen as something of a triumph for Saudi Arabia and Iran, while Pakistan, the host and the country in the region most vitally affected by the Soviet presence across its border, had cause for relief.

The game had to be played strictly within a non-aligned context. Apart from anything else, Islam is essentially about consensus and community. Nearly all its members, even the wealthy oil producers, feel themselves to be part of the Third World, and all but Turkey are technically non-aligned. For the conservative Arab states of the Gulf and Jordan, an even-handed approach was essential. All are desperately anxious to maintain the solid front opposing the Camp David peace process. They believe that the U.S. bears a major responsibility for not having brought about Israeli withdrawal from occupied territories, or using its influence to satisfy Palestinian aspirations. It was equally important to have in Iran, the champion of Islamic revolution but a major source of instability

in the region. The initial refusal of the members of the "Arab Steadfastness Front" and Iran to attend was a blow.

The reason initially given was that the proposed date of the opening coincided with the start of the normalisation of relations between Egypt and Israel. But it was clear that the Arab militants did not want to offend the Soviet Union and were under pressure from Moscow not to attend a conference which was bound to end in some kind of embarrassing condemnation of the Afghan intervention.

One resolution applied equally to both Russia and the U.S. That was the one condemning "foreign pressures on certain Islamic states" from superpowers and "great powers" (meaning France and Britain) and warning against the region's being made into an arena of conflict as a result of their rivalries. It was seen as upholding both the U.S. and the Soviet Union to keep out of the Indian Ocean and Arabian Sea.

By contrast the main resolution condemning the Soviet Union's occupation of Afghanistan and calling on it to withdraw its forces, not only used the word "aggression" but also that it paid little respect to those anxious not to offend Moscow.

but also won their support. All agreed to give the Communist regime in Kabul no aid until Russian troops withdrew, and though the language here was toned down, it pledged aid to refugees and, by implication, the Afghan resistance. Eleven members eventually dissociated themselves from the call to consider pulling out of the Moscow Olympic Games.

Somalia was encouraged to introduce its own resolution, denouncing "the presence of military forces of the Soviet Union and some of its allies in the Horn of Africa," and calling for their unconditional withdrawal.

Although every Islamic conference has condemned Israel and Zionism, the peace treaty with Cairo resulted in a resolution to extend the provisions of the Arab boycott to Egypt. This was put on the agenda as a gesture to the "Steadfastness Front" and is expected to have little practical effect.

Iran duly obtained its resolution on "external pressures" by the U.S. But it was a pale shadow of the original draft. It declared the conference's "firm opposition to any threat or use of force or any kind of intimidation or imposition of economic sanctions," but against this was offset the wish that Iran and the U.S. "would resolve the outstanding problems between them by peaceful means."

Earlier Iraq had been outspokenly critical of Iran's flouting of international norms and went so far as to suggest that it had brought sanctions upon itself.

Broadly speaking the summit was, therefore, contained to the original issue. For the Islamic Conference and the countries which it represents, the meeting notwithstanding the strains and differences, signalled a new solidarity in the face of the biggest challenge to the Moslem world since the end of colonial era.

Bomb shatters Paris Embassy

PARIS—One person was killed and at least eight injured when two bomb blasts ripped through the Syrian Embassy here yesterday.

The dead man was later named as Mr. Marwan Mamamy, a consular official. Among the injured were five women Embassy employees, including three French women and two Syrians.

The bombs went off almost simultaneously on two floors of the Embassy building, situated in the 16th Arrondissement.

Witnesses said the first exploded on the first floor near the offices of the Ambassador and the Consul and the second struck the ground floor. The building, which is surrounded by a forest of communications antennae, was seriously damaged.

The blasts came on the eve

of a visit to Paris by Mr. Abdel Halim Khaddam, the Syrian Deputy Prime Minister and Foreign Minister, who is to have talks with French leaders. Asked if he thought the attack might be connected with the Minister's visit, Dr. Issam Hayani, the Embassy Minister, said: "Perhaps, perhaps."

The attack was the first on Arab diplomatic premises in Paris since July 1978, when two gunmen claiming to be members of a special task force on the Palestine Liberation Organisation (PLO) took several hostages at the Iraqi embassy.

One gunman escaped but the second was wounded by embassy guards who also killed a Paris police officer in a shoot-out. An embassy guard was killed by the police. Three Iraqi diplomats were arrested and expelled, and three

days after the attack, two pro-Israeli Palestinians killed Mr. Ezidine Kalak, the PLO mission chief in Paris, in his offices.

Mr. Zohair Mohsen, the head of the PLO's military department, who also directed the pro-Syrian Saiga guerrilla organisation, was shot in the head and later died while on a French Riviera holiday last summer. A Lebanese national was arrested in Switzerland in connection with the shooting.

Earlier this month the Lebanese director of a militant Arab bookshop in Paris was killed by a lone gunman and a Rejection Front group claimed responsibility for the shooting. The PLO in Beirut accused both Israeli intelligence agents and pro-Israeli Palestinians of responsibility. Reuter

Ohira sends envoy to Mideast

BY CHARLES SMITH, FAR EAST EDITOR, IN TOKYO

JAPAN'S Prime Minister, Mr. Masayoshi Ohira, is to send a special emissary to the Middle East to express Japanese solidarity with the Islamic world following recent events in Afghanistan. The emissary will be Mr. Sunao Sonoda, Foreign Minister in the last two Cabinets.

News of the plan emerged during questioning in the Japanese Diet on Monday. Mr. Sonoda accepted the task yesterday on condition that his discussions with Middle East Governments should not be confined to oil problems.

The Government has yet to decide which countries Mr.

Sonoda should visit. It seems likely, however, that he will be going to Saudi Arabia, the United Arab Emirates and Kuwait. Iran will be included if the problem of the U.S. hostages has been settled in time.

Foreign Ministry officials say Mr. Ohira has been anxious to visit the Middle East but could not fit the trip into his timetable. The idea of sending a special emissary for the Prime Minister dates from before the Soviet intervention in Afghanistan but began to be considered much more seriously afterwards.

Japan says that there is an evident need for the countries of west Asia to cope with the political and strategic situation that has arisen after the Afghan affair. Japan would like to help them do this, but is unable, officials stress, to make any military contribution in the region's security.

It can provide economic aid and express support for the region's foreign policy objectives. Mr. Sonoda will do the second of these things while collecting information on ways in which Japan can make a more positive contribution.

Giscard and Gandhi in accord

BY K. K. SHARMA IN NEW DELHI

PRESIDENT Giscard d'Estaing of France has achieved a major foreign policy success during his state visit to India. A communiqué signed yesterday at the end of his discussions with Mrs. Indira Gandhi, however, leaves much to be desired in their assessment of the Soviet invasion of Afghanistan.

In the communiqué the two countries call for "scrupulous respect" for the sovereignty of all countries and for their right to determine their own destinies. This is thought to be an implicit reference to Afghanistan.

The leaders appeal to all nations, "particularly the powerful ones" to recognise deterioration in international relations and to make efforts to avert it. They plan to follow up this statement at a diplomatic level in the U.S. and Soviet Union and among their respective neighbours. They will also hold periodic consultations.

India has recently changed its pro-Soviet position on Afghanistan and now calls for a withdrawal of troops by the Russians. The French agree with this stand and evidently

agree with India that stronger measures aimed at compelling the Soviet Union to withdraw will not resolve the issue. But feel that diplomatic pressure will be more effective.

Indian officials are particularly happy over the outcome of President Giscard's visit, since France is thought to follow an independent policy line which is not entirely western in its assessment of events in India and in south Asia as a whole. President Giscard flew from Delhi to Bombay yesterday and will return to France on Thursday.

Rival forces mobilise in Lebanon

By Ihsan Hijazi in Beirut

TENSION mounted in southern Lebanon yesterday as rival forces ordered full mobilisation, increased their air and sea activity and artillery duels intensified.

A report by state-run Radio Lebanon that Israeli tanks and armour had crossed the border and taken up positions inside the Christian-dominated enclave was not confirmed by United Nations officials in the area.

But Israeli gunboats were sighted off Tyre and jets flew reconnaissance flights over most of the southern sector. The Israelis said they were keeping a close watch on Syrian military moves in Lebanon.

Syrian troops serving with the Arab League deterrent force withdrew from their positions in south Lebanon last week and regrouped in the Bekaa Valley to guard against what the Syrians described as "a possible Israeli surprise attack."

Israeli-backed Christian militias under Major Saad Haddad, United Nations forces and Palestinian guerrillas all ordered full alerts yesterday as artillery exchanges between the guerrillas and the militias worsened.

According to Press reports, Israeli gunboats bombarded the village of Qalich, about 12 miles south of Tyre. The right-wing Press said Lebanon was in danger of being caught in a war between Syria and Israel.

Freed detainees could damage Mugabe vote

BY BRIDGET BLOOM AND MARK WEBSTER IN SALISBURY

THE GLOVES came off in Rhodesia's election campaign yesterday when Mr. Robert Mugabe, leader of the guerrilla party ZANU (PF) was castigated as an enemy of black nationalist unity, the leader of a "narrow-minded and selfish clique" and a man who showed an "inordinate lust for power."

The attack came at a Press conference given by the group of 82 former members of ZANU who returned from detention in Mozambique on Monday.

The spokesman of the group, Mr. Rugare Gumbo, former ZANU secretary for information, accused Mr. Mugabe of being a "master of intrigue" who "with his henchmen, had been responsible for the removal" of many "brilliant" commanders of the ZANU military movement.

The language used by the group, who were detained at varying times between 1974-75 and 1978, is the most intemperate yet used in the campaign for the British-supervised elections due to be held on February 27-29.

But the chief interest in the group is its likely political future. Some observers believe that if the 10 key men on the platform yesterday were to stand for election they could tip the balance against Mr. Mugabe's party.

The 10 men, who include Mr.

Henry Hamandira, former ZANU secretary for manpower planning; Mr. Mukwinda Mudi, former secretary for foreign affairs; and four other former members of the ZANU central committee, did not disclose their intentions. But competition for their support between the two major parties and some of the minor ones who are opposing ZANU (PF) is intense.

All the men are Karanga, from Victoria province. It was at one time thought that Mr. Mugabe's party would carry nearly all the 11 seats allotted to the province. But if the released detainees decide to stand either for Mr. Nkomo's Patriotic Front, or for Bishop Abel Muzorewa's United African National Council, observers believe they might undermine the Mugabe vote.

If they were to decide to stand for a number of parties, and three have already been nominated for the Karanga-based Zimbabwe National Front, the harm inflicted on ZANU (PF) would be very much less.

ZANU (PF) officials maintain that they are unworried by the return of the detainees. But the decision of Lord Soames, the Governor, to allow the men to stand for election if they want to, even though the formal deadline for nomination passed 10 days ago, is seen as an anti-ZANU move.

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UK NEWS

ITV 2 operators face £25m early loss

BY ARTHUR SANDLES

THE fourth television channel—ITV 2—could make a loss of £25m in its early years and television franchise holders in the new Independent Television contract area face a daunting first year of operation, Mr. William Brown, chairman of the Independent Television Companies Association and managing director of Scottish Television, forecast yesterday.

A few days ago the Independent Broadcasting Authority produced details of new contract areas and published projected prices for both rental fees and subscriptions towards the running of the fourth channel. The rental fees, in particular, are considerably higher than many had expected.

"All over Britain in the last few days, calculators have been glowing red-hot as finance controllers, existing and aspiring, have done their sums and then have probably done them again in the hope that they were wrong the first time," Mr. Brown told a Broadcasting Press Lunch in London. "The answers they are getting make sobering reading."

No one expected to create a television service on the cheap. But what the announcement had

emphasised was that the run-up costs were to be formidable. "In the period of some months, when heavy investment is being made without any income from advertising, a very substantial sum of money must be found."

Mr. Brown said that in 1982, television industry profits, before levy, would be reduced from around £110m to £40m. After levy, they would be reduced from £45m to £20m.

Legislation

Legislation covering the setting up of the fourth channel is expected early next week. There have been rumours that this might involve the changing of the present television levy system from one geared to profits to one based on turn-over. According to Mr. Brown, the fourth channel was "simply not on" if this change was made.

When asked if this meant that the TV companies would not apply for contracts if the fourth channel were a condition of those contracts, he replied that it would lead to the IBA rethinking its sums.

It is in the interests of present franchise holders to paint a bleak financial picture in order to deter the enthusiasts of possible rival bidders. Nonetheless, the IBA demands have certainly sent a cold shiver through some board rooms. The contract periods are for six years, which may be extended to seven by the new Bill. Any investor would thus have a relatively short time in which to make a reasonable return.

"In the first full year of operation," the predictions are that the channel will cost a net £20m to £25m and an improvement in that figure in subsequent years will depend on the buoyancy of advertising and on the channel managements' ability to contain costs," Mr. Brown said.

In discussing the structure of the fourth channel, Mr. Brown said: "The companies do not believe that the two schedules can have a totally separate and independent existence. There must, in reality, be some kind of co-operation if we are to keep any sort of competitive stance with the BBC and pursue sensible co-ordination between the two ITV services."

Companies 'likely to stop preferring' chartered accountants

BY MICHAEL DIXON, EDUCATION CORRESPONDENT

A warning that industry and commerce are likely to stop preferring chartered accountants for jobs in financial management, is given today by a group of seven industrial finance directors who are themselves chartered accountants.

To resist growing competition for such jobs from business-school graduates and other types of accountants, the chartered institutes must stop restricting membership to people trained almost entirely in a professional accountancy practice, says the report, by a working party of The 100 Group of Chartered Accountants.

The institutes should approve, as soon as is practicable, training schemes in selected industrial and commercial companies as an alternative route to the chartered qualification.

This proposal conflicts with a training plan issued only last week by the education and training directorate of the Institute of Chartered Accountants in England and Wales, which is by far the biggest accountancy body in the UK.

While the directorate's plan suggested major changes in examinations, it insisted that training for membership should still be largely confined to practising firms of chartered accountants.

But the seven industrial financial directors argue that big professional firms—which provide the bulk of training for new members—will be obliged to concentrate increasingly on specialised auditing procedures under pressure from the Government, the European Commission, and other external factors.

As a result, professional firms will become a less suitable training ground for financial management in industrial and commercial companies. These will, therefore, increasingly develop their own training schemes, perhaps in association with business schools and the Cost and Management and Certified accountancy bodies.

The same process, the financial directors say, "may make the training in a professional accountancy firm much less attractive to a graduate wishing to obtain a general financial grounding."

Training with professional firms affiliated to the England and Wales Chartered Institute now accounts for about one in every 10 university graduates going directly into regular employment of all kinds in the UK.

Training and Development of Finance Managers for Industry and Commerce: The 100 Group (38, Finsbury Square, London EC2A 1PX); £5.

Pension fund buys an American forest

BY RICHARD MOONEY

A BRITISH pension fund has invested several million dollars in buying a U.S. forest.

Economic Forestry Group negotiated the deal for the fund which, it said, prefers to remain anonymous. The group believes this is the first time a UK pension fund has invested in overseas forestry. It expects the investment to be expanded substantially later.

Institutional investors, attracted by the combination of land and timber, two commodities whose prices have consistently beaten inflation in recent years, have shown increasing interest in forestry. The group estimates that up to 20 pension funds have holdings in UK forests.

But with only about £20m worth of British forest land being offered for sale each year the UK market is too small to satisfy the enormous investment potential of these institutions.

Investment in forestry is a long-term proposition, so the political and economic stability of the country in question is a crucial consideration. On this basis the U.S. offers an ideal alternative to domestic investment, especially in the southern states where the growth rate is faster and environmental objections are less strident.

The deal negotiated by Economic Forestry Group involves land in Georgia.

Improved safety at nuclear plants

By David Fabbock, Science Editor

NO NUCLEAR accident classifiable as a "dangerous occurrence" under the nuclear regulations took place at any of Britain's 11 Magnox nuclear power stations during 1977 and 1978.

But four workers at British Nuclear Fuels' Windscale factory received more than the permitted 5 rems of radiation a year in 1978. There were three such cases the previous year. There were six overexposures in 1976 and 36 in 1975.

This is disclosed by Mr. Ronald Gausden, the Government's chief nuclear inspector, in the Health and Safety Executive's bi-annual report on nuclear establishments.

Mr. Gausden pays tribute to the "excellent record maintained by the generating boards" and to the "overall improvements" which have been maintained in the plants of British Nuclear Fuels, especially the Windscale factory.

No one employed at any British nuclear power station received more than the permitted 5 rems of radiation per year during 1977 or 1978. The Nuclear Installations Inspectorate recovered half the cost of its operations, £1,375m out of total costs of £2,750m, from nuclear licensees in the year ending April, 1978.

Mr. Gausden says the period under review has been one of frustration because the Inspectorate has been unable to recruit all the staff it needs. He cites two particular problems.

First, the possibility that most of the Health and Safety Executive would be moving from London to Bootle, Merseyside, produced "strong reactions" from most of his inspectors.

Second, conditions and salaries for inspectors have become "much more attractive" in other nuclear organisations, such as the generating boards and the nuclear companies.

Health and Safety: Nuclear Establishments 1977-78, HM Stationery Office, £1.25.

Need for new pits 'not established'

BY MARTIN DICKSON

A SUSTAINED and detailed attack on the National Coal Board's plan to mine in the Vale of Belvoir got under way yesterday when Leicestershire County Council opened the objects' case before a public inquiry.

Sir Frank Layfield, counsel for the council, told the inquiry at Stoke Rochford Hall, near Grantham, that the board had not proved the economic need for the three new pits it wants to sink in the scenically attractive vale.

The start of the evidence from the council, which is strongly opposed to the development, marks a new stage in the inquiry, which has been running for 40 days. The council is the first of many groups which do not want the Belvoir development to go ahead to give evidence.

Sir Frank said the scale and effect of the Belvoir scheme would be so large and so serious that it was a paramount requirement that the need be proved. "No single case since the end of the Second World War has been the subject of a planning inquiry where the proposals in question have so great an impact on the English countryside," he said.

The dominant issue in the inquiry was whether there was a national economic need for Belvoir coal. Having now heard the NCB's case for development, Sir Frank was convinced that this was "quite inadequately founded."

The Coal Board's application had to be set against the various forecasts of Britain's future energy demands. A senior official from the Department of Energy had told the inquiry that its assessment of Britain's needs in the year 2000 had fallen from 500m to 600m tonnes of coal equivalent about two years ago to 445m to 510m tonnes in July last year.

Sir Frank said he would have expected this fall to have been reflected in the NCB's assessment of coal needs, but this had not been the case.

There were two sides to the question of economic need. The first was what problems would there be if permission to mine Belvoir coal was not granted. But the inquiry also needed to take into account the economic and environmental dangers if approval was granted.

Sir Frank said Department of Energy estimates showed that coal consumption in power stations would start to decline in the 1990s—just when Belvoir would become operational.

Yet the Coal Board's case for the project had been made on the basis of the need for power station coal, he said.

Turning to environmental issues, Sir Frank said the Vale was "one of the few areas remaining in Southern England so remarkably unspoilt." The Belvoir project would be a totally "alien growth," and would result in major agricultural losses—up to 1,550 hectares might be taken out of production, while drainage of 2,250 hectares could be affected by subsidence.

The particularly controversial NCB plan to build large spoil pits on the sites of its three mines was in itself "a good reason for refusing the project at the very outset."

The council's first witness, Professor Colin Robinson, of the University of Surrey, said the crucial issue at the inquiry was the future price of British coal. There seemed an argument for leaving the coal under the ground for the time being since it was likely to be an appreciating asset. The Coal Board's arguments for haste in reaching a decision on Belvoir coal were, therefore, unconvincing, Prof. Robinson said.

Barclays face race protest

BY JAMES McDONALD

ANTI-APARTHEID demonstrations will be held today outside Barclays Bank branches in 20 British cities as a protest against the bank's intended purchase of shares said to be worth over £19m in Sasol, the South African oil-from-coal project.

The demonstrations are being organised by End Loans to Southern Africa (ELTSA) and the Anti-Apartheid Movement.

They will be followed later by international campaigns against Barclays and overseas banks involved in the financing of Sasol.

In London, there will be a picket outside the Barclays branch in Westminster which will perform street theatre and mime.

Occidental agrees to pay higher rates for Flotta oil terminal

BY JOHN GRIFFITHS

THE OCCIDENTAL North Sea consortium and Orkney Islands Council have signed an agreement under which Occidental will pay about £1.8m more in rates this year than legally required on its oil-handling terminal on the island of Flotta.

Occidental is waiving its right to a lower rates bill, won when it appealed against its original assessment soon after oil started flowing to the Flotta terminal from the company's Piper field in 1977.

Occidental argued that because the Flotta plant separates gas from the 430,000 barrels of oil received each day, it is a process plant rather than a storage depot as originally designated. Under a 50-year-old law, process plant qualifies

for a 50 per cent derating.

The local rating assessment panel upheld Occidental's argument. This was confirmed on appeal to Edinburgh, even though gas separation is a relatively minor part of the terminal's function.

Two factors combined to produce the change of stance by Occidental leading to this week's agreement. First, it spent considerable effort and money to gain acceptance among the islanders—its public relations exercise included free wiring for electricity in all homes on Flotta and the gift of a £6,000 grand piano to the local academy. The rating challenge appeared to threaten its good neighbour policy.

Second, Orkney Islands Council last year compensated

for its "lost" revenue by doubling the Orkney rate demand to £1 in the £1, and handing a 45p in the £ rebate to islanders.

The agreement provides for the 50 per cent reduction to continue to be applied to the processing plant itself. This, however, represents only about a quarter of the terminal's rateable value. The precise proportion is still being worked out. The agreement's effect is that Occidental is likely to pay about £4.8m in rates this year, against about £3m under the terms won at its rating appeal.

The three-year-old saga has been watched closely by the Shetland Islands Council and the BP-led consortium of 32 companies developing the much larger oil-handling terminal at Sullom Voe.



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UK NEWS

Scots steel men walk out

BY OUR INDUSTRIAL STAFF

SUPPORT FOR the steel strike among private sector members of the Iron and Steel Trades Confederation increased yesterday when 160 workers walked out at Parkhead Forge, Glasgow, Scotland's only major private steel company.

There was also a sharp rise in tension in South Wales, where at least 39 pickets were arrested after incidents at two private steel works.

In London, about 400 workers converged on the Law Courts, where a four-man delegation met Lord Denning's clerk.

In the Midlands, Lord Denning's ban on extending the strike to the private sector was defied by about 10,000 steel workers. The largest concentration of private sector steelmen, now idle in support of their colleagues in BSC, is in the Black Country, with 3,000 men at the Round Oak works in Brierley Hill and another 2,000 at Patent Shaft, in Wednesday.

The Scottish workers who

walked out at Parkhead Forge, part of the Johnston Firth Brown Group, had originally been reluctant to do so, but were told by Mr. Ian Scobie, Scottish organiser of ISTC, that Lord Denning's ruling in favour of the private steel makers did not apply since the Court of Appeal had no jurisdiction in Scotland.

The company said it would try to carry on its remaining 340 employees, members of other unions, are working normally but picketing has prevented the plant from receiving steel from other group plants in Sheffield for some time.

The Scottish strike committee is continuing its efforts to prevent steel being imported by meeting dockers from Leith and Grangemouth to ask them not to handle cargoes brought in from abroad.

The arrests in South Wales followed violent incidents outside the Pontypool stockholders Walker Steel, where more than 60 men tried to stop lorries leaving, and outside the GKN

plant at Newport. Gwent police said they were the first major incidents in the region even though it was in the heart of the steel dispute.

A distinct hardening of attitude among Welsh steel workers undoubtedly buoyed up by yesterday's Wales TUC 24-hour protest strike, was also in evidence at a meeting between Port Talbot's strike committee and work council representatives from the Metal Box plant.

The strike committee rejected a fresh plea from the Metal Box workers for the intensive picketing of the plant to be eased. The company is expected to begin lay-offs at the factory, next weekend.

At the private steel making company Dupont, in Llanelli, which has been strikebound since the weekend, pickets withdrew a concession which had earlier allowed construction workers onto the premises.

Dupont workers were planning to meet last night, Tuesday, to decide whether to return to

work, in the light of the decision from the Iron and Steel Trades Confederation national executive.

More support for the strike came from the miners' union in Nottinghamshire whose area council decided to steel workers that they would not object if they put a picket at each colliery.

Mr. Joe Whelan, the Notts area secretary, said: "If any lorries should go past the picket, then our men will be instructed not to unload them."

Meanwhile, BSC is expected to tell union leaders on Friday of plans to shut the Prothero Works, Wednesbury, with the loss of 600 jobs. With unemployment at nearby Wolverhampton at 7.3 per cent this will be another blow to the Black Country area.

The British Independent Steel Producers Association (BISPA) said yesterday it expected the ISTC executive council to comply with the injunction to end their strike call to private sector ISTC members

Cope Allman director resigns

By Alan Friedman

PETER HUGHES, finance director of Cope Allman International, the industrial holding company, has resigned after what one board member described as a "conflict in management style."

Mr. Hughes, who had been with the group for three years and had earlier served on the board of Greater Metropolitan, resigned yesterday after a dispute over his departure was a result of his questions of style and several broader questions related to the group's investment policies.

Mr. Hughes, whose resignation was announced to the Stock Exchange on January 4, said: "Mr. Louis Manson, the group's chairman, knew about my planned departure as early as last June. I suggested to him in a memo shortly before the meeting that he inform the shareholders at the annual general meeting on December 6, but he did not do so." The resignation was effective on December 31.

Mr. Jim Cameron, the group's industrial director, said on Monday that Mr. Manson was not of the country. "I was not privy to the request from Mr. Hughes to the chairman, but I think it would have been premature to have announced the resignation at the annual general meeting," he said.

In a letter to Mr. Hughes, dated January 4, 1980, Mr. Manson wrote: "The reasons for the termination of your employment will be kept confidential by both parties (except as required by law) and you will not in the future disclose to any third parties any confidential information relating to the activities of the company or any of its subsidiaries."

According to Mr. Hughes there were several issues of investment policy on which he and Mr. Manson disagreed. Most notably, he said that the pursuit of new product development was neglected and that group acquisitions were not generally preceded by enough thorough market research.

Sinclair sells £100 computers

By Guy de Rougemont

THE WORLD'S cheapest personal computer, priced just under £100, was launched yesterday by Sinclair Research, the company set up by Mr. Clive Sinclair last September after he resigned from state-backed Sinclair Radionics.

Mr. Sinclair said that the low price had been made possible by several technical innovations which would give the product "a commanding world lead" in the fast-growing personal computer market. This is dominated by U.S. made machines selling for £400-£1,000.

He claimed that the new computer, called the ZX-80, was technically at least equal to its more expensive competitors and had the edge in several respects, notably its operating speed.

The computer is about as big as a hard-back novel and weighs 12 oz. It does not have a video display unit but can use any black-and-white television by connection to the aerial socket.

Shell to search for gas and oil near Stafford

BY RAY DAFTER, ENERGY EDITOR

SHELL UK and British National Oil Corporation have been given Government approval to drill for oil at a site near Stafford, in the Midlands.

The new petroleum production licence, covering 64 square kilometres to the west of Stafford, marks an increase in exploration activity on land in the UK. Shell will be the operator for the licence, which authorises the holder to drill for and produce oil or gas if it is found.

It is expected that any onshore oil field will be very much smaller than those in the North Sea. However, with oil costing around \$30 a barrel (equivalent to about 35 gallons), even small finds are becoming commercially attractive. Furthermore, drilling costs on land are a fraction of those offshore, about £250,000 a well, according to a report by brokers Henderson Crosthwaite and Co.

Onshore production

Small amounts of oil have been produced from onshore fields for many years. Last year, for instance, some 115,000 tonnes were produced from 140 onshore sources, compared with 76m tonnes from the North Sea.

The onshore contribution to Britain's energy supplies will increase significantly as production builds up from the British Gas-Petroleum field at Wytch Farm in Dorset. This field is thought to have recoverable reserves similar in size to the smaller North Sea fields, with a production capability of around 15,000 to 20,000 barrels a day.

More than 40 licences per-

mitting the onshore production of oil and/or gas are in force. There are very many more exploration licences which allow companies to carry out seismic work but restrict drilling to a depth limit of 350 metres.

UK oil production last year was 76.4m tonnes—within the Government's forecast for the year of 70m to 80m tonnes—according to Energy Department figures published yesterday. Output from the 14 operating North Sea fields in December was 6.38m tonnes (1.54m barrels a day), a slight increase on the previous month's output of 1.51m barrels a day.

Lower estimate

According to a new analysis of the North Sea, published by stockbrokers Wood Mackenzie, production levels this year should average 1.52m b/d—enough to enable the industry to achieve energy self-sufficiency at least during the later months of the year. Their latest estimate is some 350,000 b/d less than previous forecasts.

One reason for the lower estimate is the delay to the start-up of BP's Buchan Field. The field, with at least 50m barrels of recoverable reserves, has been brought on stream late last year.

But delays to the conversion of a drilling rig, largely caused by a labour dispute in a Scottish shipyard, have meant that BP will not be able to begin production until the middle of this year. However, the seven production wells on Buchan have been drilled and connected to ocean-bed production facilities.

Protest at Gatwick extension inquiry

BY MICHAEL DONNE, AEROSPACE CORRESPONDENT

A SECOND passenger terminal at Gatwick Airport, Sussex, is needed to ensure "an orderly and flexible" growth of air traffic in the London area through the late 1980s and beyond.

This view was put to the Government's public planning inquiry into the plan for a £100m second terminal at Gatwick. The inquiry began at Crawley Town Hall yesterday in the presence of a large number of dissenters to the scheme.

Under the chairmanship of Mr. John Newey, QC, it is expected, like that nearly two years ago into the fourth terminal at Heathrow, to last several months because so many objectors have submitted requests to give evidence.

A number of demonstrators from villages round Gatwick gathered outside the town hall, chanting anti-airport slogans. For the British Airports Authority Lord Silcock, QC, told the inquiry that the second terminal was needed to raise Gatwick's passenger capacity from 16m passengers a year to 25m.

"Terminal Two is needed in order to meet forecast growth in demand for passenger-handling in the London area, and is justified in its own right in order to meet that growth in an orderly and flexible manner," he said.

The "throughput" of 25m passengers a year could be handled with only one runway at the airport, he said.

Lord Silcock added that effects of the proposed development in terms of noise, increased road traffic and air pollution, would be in general be small, and that these would not in themselves justify rejection of the plan.

But Mr. Meredith Jackson,

vice-chairman of the Gatwick Area Conservation Campaign, the leading protest group, said that the inquiry was not just a legal one.

"Emotions are aroused by this proposed scheme, which is totally against the wishes of the people," he declared.

The British Airports Authority is supported in its case for the second terminal by British Caledonian and other airlines using Gatwick. Evidence will be given by Mr. Norman Payne, chairman of the

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authority, and Mr. Don Turner, planning director.

The terminal is planned for the north-west corner of the airport. But there is no intention of building a second runway at Gatwick.

The authority believes that with increasing use of wide-bodied jet liners expansion to 25m passengers a year can be met by one runway, with only an expansion of the taxi-way to allow for its use as an emergency runway when the main runway is blocked.

When the inquiry is complete, Mr. Newey will report to the Secretary for the Environment, and it will be up to the Government to decide whether to permit the development of the terminal.

A similar public inquiry was held into the fourth terminal at Heathrow, which is now going ahead. Another is due later this year into the Government plan to develop Stansted Airport as London's third big airport.

£500m gas plant plan faces court test

AN ENVIRONMENTAL group began a court action yesterday to try to prevent Shell and Esso from building a £500m natural gas separation plant and ethane cracker at Mossburn in Fife.

The two companies were given planning permission for the chemical complex in August by Mr. George Younger, Scottish Secretary.

In an action before three appeal judges in the Court of Session in Edinburgh Mr. Drummond Young, counsel for the Aberdeen and Dalsky Bay action group, claimed Mr. Younger had confused two safety considerations.

In general terms, there was the question of whether the proposed development would be inherently safe to a specified acceptable standard. That had to be considered in the application for outline planning permission.

But consideration could not be given to whether the development was actually designed and built to within these standards until construction was under way. The Secretary of State is opposing the action which continues today.

Rise in cost of house rebuilding

By Eric Short

THE COST of rebuilding a house or bungalow rose on average by a fifth last year, according to figures released yesterday by the British Insurance Association.

The BIA house rebuilding index increased by 20.2 per cent during 1979 from 105 (July 31, 1978=100) to the end of 1979 to 126.2 on December 31, 1979.

In the final three months of the year, the index advanced by only 1 per cent from 124.9 at the end of September to 126.2. But the relative slowness of the rise was attributable largely to a seasonal lull in materials price rises, which is normally followed by price rises in the New Year.

Also, during the final quarter of 1979 there was no change in wage rates for building workers and only minor changes in the cost of employing electricians and plumbers.

£2m order for Foden
FODEN, the Cheshire-based commercial vehicle maker which has slipped into losses in the past year, a £2m order from Esso Petroleum for 75 tractor units. A further order, from another—65 eight-wheeled trucks—and also worth £2m—is expected to be announced soon.

GLC sales plan
PROSPECTIVE TENANTS for 750 Greater London Council "higher rent" homes will have to show that they are prepared to consider buying the properties eventually.

The new scheme is part of the GLC's plans to increase home ownership in London. The homes are to be offered at double normal rents to single people, couples or families who are already living or working in London.

Banking on machines
CLYDESDALE BANK has ordered a further 50 automated banking terminals to increase its network. The £15,000 Chubb terminals, which can dispense cash in varying amounts and be used to request statements or cheques, are to be installed at the rate of one a week throughout the year.

Clydesdale already has 25 and eventually intends to extend the system to all of its 370 branches.

Government insists on rates plan

By Robin Pauley

LOCAL AUTHORITY leaders failed to win any concessions on the Government's proposals for a unitary grant system of rate support when they met Mr. Tom King, Minister of Local Government, yesterday.

The chairman of the Association of Metropolitan Authorities, Association of County Councils and Association of District Councils are united in their opposition to the plan in the Local Government Planning and Land Bill, which is expected to receive a second reading in the Commons next week.

The Government feels the proposals allow greater freedom to local authorities in the framework of central government control on overall spending.

The authorities, all Tory controlled, feel the move will reduce local autonomy and significantly alter the traditional relationship between central and local government.

The associations are working to enlist support against the bill on both sides of the House and are hoping for amendments and deletions

OBITUARY

Sir Edward Lewis

BY JOHN LLOYD

THE DEATH of Sir Edward Lewis, chairman of Decca, has occurred only days after he agreed that the company he made internationally known should be taken over by the Rascal defence, electronics, and communications group.

At a young age he acquired the kind of reputation now enjoyed by the man with whom he was negotiating up to his death—Mr. Ernest Harrison, Rascal's chairman. It was the reputation of a man of commercial talent and courage, with a good nose for technological innovation.

His interest in Decca was stimulated when, as a young stockbroker of 28, he attempted to improve the company's finances after seeing those to whom he had sold its stock in danger of losing badly on their investment. He was made chairman soon afterwards, and managed to restore the struggling record company to profitability, and indeed to expansion, in the U.S. (among the contracts he acquired was one with Bing Crosby).

Before the war Decca



remained largely a record company, with a small interest in radio manufacture. It was during and immediately after the war that two innovations radically changed the nature of the company.

The first of these was the navigational systems, which were well enough advanced to be fitted to naval craft by the end of the war. The system, depending on a chain of land-based transmitters working in phase with a receiver on ship, was wholly a Decca innovation. The second was less of an

innovation, more of a talented adaptation, and came after the war. Decca took the new tool of radar and fashioned it into a marine and, latter, aviation system—the work being led by Mr. (later Sir) Edward Pennessy, who retired two years ago as managing director of the Post Office's telecommunications business.

Decca's marine radar quickly became a world standard, though the aviation equivalent was less successful. The 1950s and '60s were the high water mark of Decca's success. Its navigational chains commanded worldwide coverage, its radar equipment was installed in most fleets, and its early espousal of long-playing records—another Lewis hunch—paid off. Though in his sixties, Sir Edward did not wholly lose touch with the music business. He is famous for turning away the Beatles, but less famous for signing up the Rolling Stones, perhaps a more adventurous choice.

Sir Edward's first wife died in 1968; he married again in 1973. He leaves a son by his first marriage.

The Post Office is publishing, free of charge, copies of a series of specially commissioned articles by independent experts on small freight and parcels distribution. Here is a precis of one of the most important—now revised and updated—written by J.R. Kelly, managing director of a leading transport consultancy.

Own vehicle distribution—is there now a case for re-appraisal?

A great deal of effort has been devoted to improving production and marketing; but little attention has been paid to distribution, which for too long has been regarded as the poor relation in the industrial process. Now, due to cost increases, corporate management is examining this area more critically.

Significant increase in costs
Wage settlements, oil crises and higher fuel taxes have increased costs both for companies with their own vehicles and for carrier services—as can be seen from the graph.

Taking as an example an average-sized delivery van (6½-8½ tonnes gross vehicle weight) travelling 24,000 miles per annum, the overall cost increase since 1972 is estimated at 210% compared with 120% increase in the cost of living.

Possible regulatory constraints, further wage demands, the rapid increase in the cost of replacement vehicles (whose prices are 3½ times greater than seven years ago)... All these factors mean the vehicle operator must carefully weigh the advantages of running his own fleet (often considerable in terms of control, customer goodwill and advertising) against the potential of using a third-party carrier.

In practice, companies' methods of cost analysis vary greatly; the true cost of own-vehicle operation is often inadequately assessed, ignoring realistic depreciation allowances, management time and even fixed overheads.

Fluctuating workloads
Seasonal peaks and troughs and variations in demand can lead a company to under-use its transport capability—vehicles, drivers, workshops.

Empty return running adds to the cost, and so do inadequate back-up resources that cannot cope with vehicle breakdowns, driver sickness, etc.

Control, planning, labour relations, organisation of maintenance, record-keeping—these factors involve expensive management time, particularly as new rules and regulations are introduced.

Using a professional carrier

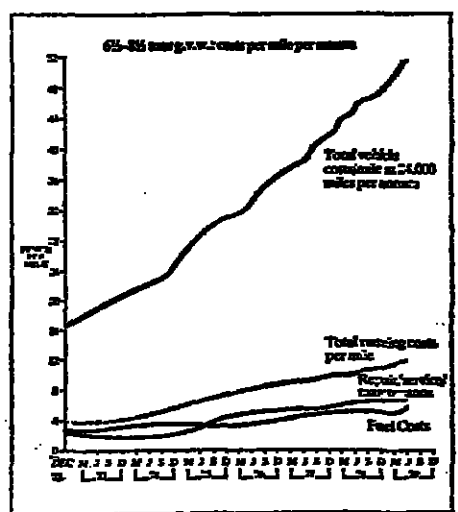
The only real alternative is to subcontract to a professional third-party carrier. Such carriers face similar cost increases, of course, but offset them by delivery from several companies to one recipient. The final delivery is the most expensive single element in the distribution process; and since several parcels can be delivered almost as cheaply as one, the carrier can use vehicles more economically—via flexibility in selecting the right sized vehicles for the load, less wasted mileage and less empty running. He spreads his costs over a large number of vehicles, and guards against

seasonal fluctuations by carrying for different industries.

Costs versus service

Any own-vehicle operator who provides a 24-hour service is probably paying heavily for the privilege; often he will settle instead for a scheduled weekly service, which puts the onus on the customer to time his order correctly. Many carriers, on the other hand, offer a 48/72 hour service—some even faster, though at a premium price.

It is not surprising that more and more companies are now taking the view that sub-contracting of deliveries to professional carriers can provide an efficient and economical alternative.



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Please send me... copies of the full article. Own vehicle fleet costs versus carrier prices by J.R. Kelly. I would also like copies of these other articles in the series.

(Indicate numbers required in boxes) The future of small order in the UK. Packaging cost versus the costs of appliances and developing an export market.

The future role of depots in a distribution network. Entering the mail order market. Mail order and Prestel.

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FT/28/1/D

THE MAJOR rationalisation programme announced yesterday by Alfred Herbert represents its last chance in a long battle for survival. Earlier programmes have been put aside as last chances, but this time there is nothing to fall back on.

The Government, through the National Enterprise Board, has made it clear that there is no more public money available for this one-time giant of the machine tool industry. The plan has to be self-financing, and nobody succeeds in Herbert will be relegated to the economic history books.

The plan itself gives rise to a great many uncertainties. The core is that Herbert will concentrate on advanced technology machine tools. The future of the rest, which represents quite a substantial part of Herbert, seems to be open to speculation. "We shall have to wait and see," was the only message which Mr. Peter Rippen, chairman, and his colleagues, were able to give yesterday.

On a plant-by-plant basis, the breakdown is: Edgwick, Coventry: This will

be the focus of high technology production. The plant is already making the "Husky," a numerically-controlled lathe, which was introduced about a year ago. Two more new machines, one to be launched this spring and another next year, will also be made at this plant. Production of conventional machine tools will be cut back, involving 200 out of the 700 redundancies announced yesterday.

Madkewy Lane, Birmingham: This plant, making single and multi-spindle machines, will lose 100 jobs. The order book is poor and there must be a closure before long.

Lutterworth: This profitable plant is concerned mainly with making drilling, boring and milling machines for De Vlieg, an American company, under licence. Only 27 jobs will be lost.

Red Lane, Coventry: 180 jobs will go at this plant which reconditions machine tools. Again, closure is a real possibility. In Herbert Tooling, Coventry: A separate, and profitable, part of the group which will be sold off if a buyer comes along at the right price.

Herbert Sigma, Letchworth: This company makes measuring and inspection equipment. Also profitable, it is a prime candidate for disposal.

Herbert Numerical Controls, Woking: This company, which makes control equipment for the machine tool division, has proved an expensive mistake simply because most customers specify that they want controls which are universally available, such as those of General Electric and Siemens.

In addition, 104 jobs will be lost at Herbert House, the new head office in Coventry, as part of the programme for decentralising marketing and administration.

A brief glance at Herbert's financial position shows that everything is stacked on this programme of disposals, slimming down and probably some closures.

In the first half of last year the loss was £221,000. This must have worsened considerably in the wake of the engineering slump in the second half. In 1978 the loss was £22m, plus £4m write-off on extraordinary items.

The strategy of concentrating on advanced technology machine

tools—a loose category which covers machine tools which have numerical or computerised controls—is sensible.

While the bulk of machine tools have suffered in declining markets, advanced technology machines have enjoyed steady growth for the past eight years. Britain lags behind its competitors in the number of installations of these machine tools. Given any reasonable investment basis, there must be a growing market to satisfy.

The snagging doubt is whether Herbert is not too late in this field. Imports of Japanese numerically controlled lathes have soared in recent years, and their prices are very competitive.

Herbert says it has spent £2m on developing the "Husky" and the two new machines soon to be introduced, and that these latter machines will be in the more expensive specialised category where the Germans are the main competitors.

If the product is right—and Herbert's technology was once the envy of the world—the gamble will pay off. With all the hurdles Herbert still has to surmount, however, it would be unwise to see the programme as anything safer than a gamble.

NEWS ANALYSIS—ALFRED HERBERT

Last chance for tools giant

BY HAZEL DUFFY, INDUSTRIAL CORRESPONDENT

THE MAJOR rationalisation programme announced yesterday by Alfred Herbert represents its last chance in a long battle for survival. Earlier programmes have been put aside as last chances, but this time there is nothing to fall back on.

The Government, through the National Enterprise Board, has made it clear that there is no more public money available for this one-time giant of the machine tool industry. The plan has to be self-financing, and nobody succeeds in Herbert will be relegated to the economic history books.

The plan itself gives rise to a great many uncertainties. The core is that Herbert will concentrate on advanced technology machine tools. The future of the rest, which represents quite a substantial part of Herbert, seems to be open to speculation. "We shall have to wait and see," was the only message which Mr. Peter Rippen, chairman, and his colleagues, were able to give yesterday.

On a plant-by-plant basis, the breakdown is: Edgwick, Coventry: This will

be the focus of high technology production. The plant is already making the "Husky," a numerically-controlled lathe, which was introduced about a year ago. Two more new machines, one to be launched this spring and another next year, will also be made at this plant. Production of conventional machine tools will be cut back, involving 200 out of the 700 redundancies announced yesterday.

Madkewy Lane, Birmingham: This plant, making single and multi-spindle machines, will lose 100 jobs. The order book is poor and there must be a closure before long.

Lutterworth: This profitable plant is concerned mainly with making drilling, boring and milling machines for De Vlieg, an American company, under licence. Only 27 jobs will be lost.

Red Lane, Coventry: 180 jobs will go at this plant which reconditions machine tools. Again, closure is a real possibility. In Herbert Tooling, Coventry: A separate, and profitable, part of the group which will be sold off if a buyer comes along at the right price.

Herbert Sigma, Letchworth: This company makes measuring and inspection equipment. Also profitable, it is a prime candidate for disposal.

Herbert Numerical Controls, Woking: This company, which makes control equipment for the machine tool division, has proved an expensive mistake simply because most customers specify that they want controls which are universally available, such as those of General Electric and Siemens.

In addition, 104 jobs will be lost at Herbert House, the new head office in Coventry, as part of the programme for decentralising marketing and administration.

A brief glance at Herbert's financial position shows that everything is stacked on this programme of disposals, slimming down and probably some closures.

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UK NEWS — PARLIAMENT and POLITICS

Howell defends Tory gas price policy

BY IVOR OWEN

IMPROVED social security benefit for low income families and the elderly will be introduced well before next winter when the increases in gas and electricity prices make their biggest impact, Mr. David Howell, the Energy Secretary, assured the Commons last night.

He flatly denied that the Government was artificially pushing up gas prices and maintained that if a free market had been in operation, domestic consumers would already be paying charges above the level which it was now proposed to introduce in three years' time.

Dr. David Owen, Labour's Shadow Energy Secretary, acknowledged the need for some rise in gas prices but protested that the 10 per cent above-the-rate-of-inflation formula which the Government had imposed on the British Gas Corporation for the next three years meant that the increases would take place at too sharp and rapid a pace.

In moving a motion condemning the "savage" effect which such increases would have on ordinary families, he called for the introduction of a comprehensive fuel benefit covering gas, electricity, oil and paraffin heating which would not be confined to those on supplementary benefit.

Mr. Howell contended that the effect of Government policy— which the gas corporation had agreed to implement so that its legality could not be in doubt— would be to phase out some of



Dr. David Owen (left) and Mr. Dickson Mabon

the restraint on the artificially low domestic prices so that they could rise to something closer to their true market level.

Under questioning from Dr. Dickson Mabon (Lab. Greenock and Port Glasgow), a former Energy Minister, he admitted that the gas corporation would have preferred the rise in domestic prices to have been extended over a longer period.

Some 70,000 domestic consumers and about 4,000 firms were waiting to be connected to a gas supply.

The pressures were so great that the gas corporation had to ration the provision of new supplies almost entirely to those who had a statutory right to be connected because they were within 25 yards of a gas main.

Thus, industry, despite paying higher prices than domestic consumers, had been placed at a substantial disadvantage.

Mr. Howell forecast that the saving in gas consumption resulting from the higher prices for domestic consumers, and the extra capital investment

which the gas corporation would be able to finance, as a result of its increased income, would lead to a real improvement in the availability of gas supplies to British industry in the coming years.

Mr. Howell also emphasised that in the current year the gas corporation would make no profit from domestic sales.

Apart from financing new investment, the bigger revenues would result in a surplus being passed to the National Loan Fund.

This would be "an important contribution" to the Government's objective of reducing the Public Sector Borrowing Requirement.

Commenting on suggestions that the Government should introduce a gas tax, he said: "This is something which we shall have to look at."

Mr. Howell emphasised that in real terms, gas consumers had enjoyed falling prices for at least ten years—this had been one of the number of factors all pointing, regrettably in the direction of higher domestic prices.

While no-one liked paying higher bills, the effect on the cost of living should not be exaggerated.

The 17 per cent increase on April 1 would add 0.25 per cent to the going rate of inflation. The further increase of 10 per cent in October would result in an additional 0.15 per cent.

Dr. Owen highlighted the fact that the current rate of inflation was double that of 12 months ago, and accused the Government of showing a callous disregard of the consequences of higher gas prices would have on most families in the country.

At the same time, the Government was putting up the level of domestic prices against the commercial judgment of the British Gas Corporation.

He questioned whether the Government had legislative authority for the action it had taken.

LABOUR

Peace bid fails as union walk-out disrupts BBC

BY ALAN PIKE, LABOUR CORRESPONDENT

ALL Association of Broadcasting Staff members working for BBC television were ordered to stop work yesterday as talks failed to resolve the dispute over the new Newsnight news and current affairs programme.

About 400 union members were told to stop work when a three-man current affairs film crew was suspended for refusing to accept a Newsnight assignment. They will return to work today, but the union warned last night that there would be further industrial action in response to any new suspensions.

Union leaders and BBC management representatives spent about three hours discussing the dispute with officials of the Advisory, Conciliation and Arbitration Service yesterday but progress was not made.

There is no date for a further meeting.

After protracted negotiations on terms for introducing Newsnight—a BBC-2 programme which will combine news and current affairs activities—the corporation eventually attempted to screen the first edition on Monday night. But it did not appear, and other programmes were disrupted, after the corporation and union failed to resolve outstanding disagreements over the programme earlier in the day.

The introduction of Newsnight was originally scheduled for September but was delayed because the BBC and union representatives could not agree on terms. Disagreement with the union was eventually reduced to the question of scheduling of camera crews.

The union wants assurances that current affairs crews will work only with current affairs staff and news crews with news staff. While the BBC accepts this in principle it says that it is unable to give absolute guarantees acceptable to the union.

Delayed

All news and current affairs programmes are at risk of being disrupted or cancelled until the dispute is resolved.

Mr. Paddy Leech, assistant general secretary of the union,

Ambulance staff to receive 13% offer

BY PHILIP BASSETT, LABOUR STAFF

HEALTH authorities yesterday offered 17,000 ambulance staff a pay package worth 13 per cent which unions' leaders agreed to put to their members for consideration.

Though no formal recommendation will accompany details of the offer officials are privately hopeful that the package will be accepted.

The deal in its overall size is broadly in line with that accepted by 1.1m local authority manual workers, and is in many points similar to the package being considered by 250,000 National Health Service ancillary workers.

Agreement to deals of about 13 per cent would mean settlements for all public service workers whose action over pay last winter caused considerable disruption to council, hospital and other services.

The package, which if accepted would be backdated to January 1, would give increases of 10.6 per cent on basic rates. This is slightly less than the 11.9 per cent on basic rates offered to the ancillary workers, since other elements in the ambulance staffs' package are more expensive.

The offer would take the basic rate of a trainee ambulanceman from £53.02 to £59.05, and that of a leading ambulanceman from £66.80 to £74.77.

Shift pay would be increased to 16p per hour for rotary shifts and 10p per hour for alternating shifts. The increase will cost more than the offer to the ancillary workers as 76 per cent of ambulance staff earn shift pay compared with about 40 per cent of NHS ancillaries.

The offer also includes improvements in holiday entitlements and other payments.

Rates would be further increased from April 1 by the payment of the second stage of the Clegg comparability award. Increases of between 12.8 and 25.8 per cent, at a cost of £18.6m, were the highest made in the commission's first report on local authority, health and ambulance workers.

The rate for a trainee ambulanceman would rise to £62.75 in April and for a leading ambulanceman to £82.97.

Mr. Patrick Jenkin, Social Services Secretary, yesterday welcomed a new agreement reached on Monday for a dispute procedure in the National Health Service.

He said that in the past the lack of sensible procedures had led to "damaging escalation of trivial problems." The new agreement, though, would require goodwill on all sides if it was to operate effectively.

Jobs pledge over computer introduction

By Philip Bassett, Labour Staff

THE GOVERNMENT has offered civil service unions a six-month guarantee against job losses stemming from the introduction of an advanced computer system if the unions agree to its use.

The decision, taken this week by the Manpower Services Commission, relates to CAPITAL, or Computer Assisted Placings In The Areas of London. The £11m system would have a marked effect on work in the London offices of the Employment Department.

The decision is a marked change from a warning last year that it might have to abandon the project entirely if the unions failed to give their agreement. The introduction of the system is seen as a test case for the use of new technology in Government departments.

The commission wanted to extend the CAPITAL system on a cost-effective basis, and instructed departmental managers to put forward a basis for agreement with the unions.

The basis offered is that in the event of a general agreement on new technology, which is what the two largest civil service unions want an agreement reached on CAPITAL would be reviewed to ensure that its terms are "as advantageous overall" to the unions, particularly on staffing, as the national agreement.

In order to help reach such an agreement, the commission offers to make no staff cuts in the next six months through the introduction of CAPITAL, though it makes clear that this will not affect the projected Government cuts of 12.7 per cent in the next two to three years.

The three TUC members on the commission have agreed to "use their good offices" to help secure the agreement of the civil service unions. The commission will review progress with the unions at its next meeting next month.

The system is intended to offer easier access to information about job vacancies and registered unemployed throughout London by means of visual display units.

The commission has also confirmed that up to 20 skill centres or annexes are being considered for closure, though it said yesterday that a decision would not be taken until March.

Sir Richard O'Brien, MSC chairman, said the proposals were intended to produce a network of centres which would leave the commission capable of training more people in every region, at a lower cost and with better results.

The Civil Service Union, which opposes the cuts, condemned the proposals as "callous," and said it was writing to a group of MPs to try to bring pressure on the Government to alter its policy of cuts.

Increase in child benefits urged

By Elinor Goodman, Lobby Staff

THE GOVERNMENT was yesterday urged by the Conservative Women's National Advisory Committee to increase child benefits in the Budget.

The committee represents the army of women who are such an important link in the party's local organisation. It said it was deeply worried about child benefit and the heavier burden which families with children would find this year because of the increase in school meal and transport charges.

Child benefit had been due to go up earlier this year from £4.00 to £4.50 but on coming to Government, the Tories decided not to increase the benefit.

The Treasury is already under pressure from the poverty lobby to increase the benefit. But this is the first time any organisation within the Tory Party has publicly called for an increase in public spending.

Until now almost all the messages coming out of the voluntary side of the party have been that the Government should do all it can to reduce spending and cut out waste.

Until now, almost all the messages coming out of the voluntary side of the party have been that the Government should do all it can to reduce spending and cut out waste.

The advisory committee set up a working party earlier this year to consider child benefit in the light of recent tax changes and the need to economise on public spending wherever possible.

The working party concluded that despite the cut in income tax in the Budget, the relative position of families with children had been eroded.

The working party recognises, however, that raising child benefits is one of the main ways of reducing the number of people who are better off out of work.

Families in Britain are being cheated by the Government over child benefit allowances, Labour MPs claimed yesterday.

They demanded that the Social Services Under-Secretary Mrs. Lynda Chalker uprate the allowances.

Mr. David Stoddart (Lab. Swindon) told Mrs. Chalker during questions to "go and bow her head in shame and put on sackcloth and ashes for the way in which this Government has let down and cheated families in Britain."

But Mrs. Chalker retorted: "I don't intend to act in any strange clothes in this House."

Kitson move leaves NEC at loggerheads

BY ELINOR GOODMAN, LOBBY STAFF

THE long-running argument over membership of the commission of inquiry into the Labour Party's future looks like continuing at next month's meeting of the national executive as the struggle moves on to who should chair the committee.

The signs are that Left-wingers on the executive, say that Mr. Alex Kitson, who announced his resignation from the commission on Monday, should be replaced by another member of the executive to restore the original balance on the commission between the NEC and other representatives.

Mr. James Callaghan and the executive have been at loggerheads over the membership of the commission since the party conference. Mr. Kitson's decision to withdraw was seen on Monday as a victory for moderate trade unionists.

It meant that the NEC's six members were outnumbered by a combination of the five trade unionists and the party leader and his deputy. Even so, by no means all the trade unionists can be counted upon to support Mr. Callaghan's line.

With Mr. Kitson, the party's vice-chairman, on the commis-



"Upset her for as little as £3" is the slogan on Ralph Steadman's Mrs. Thatcher cartoon, to be used in a Labour Party recruiting campaign. A beer mat version says: "Upset her, not your beer. Join the Labour Party."

Mr. Eric Heffer, launching the campaign yesterday, said the cartoon depicted the Prime Minister as "a cross between a witch and a vampire."

Heffer as chairman. Mr. Kitson's resignation endangers that majority.

It may open up the way for election of Mr. David Bassett, the Right-wing chairman of the Trade Unionists for a Labour Victory, as chairman.

As the commission chairman will have a casting vote and power to influence which subjects receive priority, both sides will be anxious to get their candidate elected.

The assumption is that Mr. Heffer will be put forward as the NEC candidate, and that the five union members of the commission will unite with Mr. Callaghan and Mr. Michael Foot, party leader and deputy leader respectively, in backing Mr. Bassett.

Left-wingers on the NEC were still discussing their strategy yesterday.

One problem facing them is that whereas in earlier votes on membership of the commission the Left had been able to count on the support of some trade unionists, now these may be reluctant to vote against one of their own number when it comes to electing the commission chairman.

Chalker payments plan attacked

THE Government came under fire from MPs yesterday when they were told a study of the arrangements for paying social security benefits has been carried out as a possible way of saving about £35m of taxpayers' money.

Mrs. Lynda Chalker, Social Services Under-Secretary, told MPs the study—including the frequency of payments and whether people should be able to choose to have benefits paid direct to their bank—was currently being considered by

Mr. Patrick Jenkin, Social Services Secretary.

Mr. Robert MacCrimmon (C. Brentwood and Ongar) said that to pay pensions and other benefits less frequently "could conceivably cause a great deal of hardship."

Payments direct into bank accounts could also cause problems because many people on social security did not have accounts. It might also cause hardship to sub-post offices, said Mr. MacCrimmon.

Mrs. Chalker told him:

"Nobody will be forced to have payments direct to bank accounts. We want to ensure the most vulnerable groups in society receive their payments weekly and through post offices, if they wish."

Mr. Ian Evans (Lab. Aberdeen) insisted the matter should be brought before MPs and debated before the Government decided on the issue.

Mrs. Chalker stressed that any new procedures would only be instituted after careful consideration and full consultation.

Credit aid for consumers planned

BY DAVID CHURCHILL

REGULATIONS to give consumers information about the true rate of repayment in credit transactions are to be introduced by the Government later this year.

The regulations, to come into force on October 6, will implement the so-called "truth in lending" provisions laid down in the 1974 Consumer Credit Act. Parliamentary Orders detailing the new regulations

were laid before Parliament yesterday.

The "truth in lending" provisions in the Act regulate the information which must be given to consumers in advertisements, whatever the medium of advertising.

Certain advertisements are excluded from the Act, including advertisements for short-term credit such as accounts settled in full weekly or monthly.

Under the new regulations, the total charge for the credit as an annual percentage rate and included in credit quotations and advertisements. This will enable consumers more easily to compare one offer of credit with another.

In many cases at present, the credit industry quotes only the "flat" rate of repayment which is often half the annual percentage rate.

£1m for strikers' families 'deplorable'

BY JOHN HUNT

MORE THAN £1m has so far been paid out in supplementary benefit to the wives and children of the striking steel workers, Mr. Reg Prentice, Social Security Minister, told the Commons yesterday.

He condemned the payments as "utterly deplorable" and complained that the major unions had not paid out a "penny piece" to support the strikers.

Later, during questions to the Prime Minister, Tory backbenchers alleged that intimidation was being used against steel workers who were reluctant to strike or picket.

Mrs. Thatcher told them that any such action would be "utterly condemned" by everyone. Unless the rule of law was upheld, "it would be the end of civilisation."

She reaffirmed that Mr. James Prior, Employment Secretary, is looking at the Employment Bill

with a view to making further changes during the committee stage.

The row ended with Mr. Michael Brown (C. Brigg and Scunthorpe) unsuccessfully trying to get an emergency Commons debate over claims of intimidation of steel workers in his constituency.

Mr. Prentice told Mr. Michael Brotherton (C. Louth) that 19 strike centres had been set up to meet supplementary benefits claims.

Up to Tuesday of last week, a total of £790,000 had been paid out to strikers' families.

Mr. Brotherton protested that the trade unions, not the taxpayer, should take responsibility for the strikers.

"I fully agree with your sentiments," replied Mr. Prentice. "It is not for me to comment upon the pace at which we should implement our manifesto

pledges. But it is deplorable that so much money is being spent on subsidising this strike."

Mr. Jack Bruce-Gardyne (C. Knaresborough) said it was an abuse for the Iron and Steel Trades Confederation to sit on a "piggy bank" of £1m of its own money. He called on Mr. Prentice to see that the Tory manifesto was "activated" to deal with this matter.

Mr. Prentice agreed that on top of the damage inflicted on the nation by the strike, the unions had "added insult to injury" by expecting the taxpayer to subsidise it.

He said the figure of £790,000 was for a week ago so the total figure was now certainly well over £1m—money which should have been contributed by the unions themselves.

During Prime Minister's questions, Mr. George Gardner

(C. Reigate) referred to a report of violence and intimidation of a steel worker, his wife and children.

He asked Mrs. Thatcher to make sure that the Employment Bill was strong enough to prevent this kind of thing.

The Prime Minister told him that violence and intimidation was dealt with under criminal law but the difficulty was to get evidence "because there is not the slightest shadow of doubt that some of these people are frightened."

Mr. Robert Adley (C. Christchurch and Lynton) called for industrial relations legislation to provide adequate protection against violent picketing, blacking and intimidation.

The Prime Minister explained that in the light of the McShane decision, Mr. Prior was "very actively considering" whether further provisions should be brought forward on the com-

mittee stage of the Employment Bill.

Mr. Michael Brown presenting his motion for a debate, quoted a circular put out to steel workers from the Scunthorpe strike committee.

The circular said: "This fight will only be won by you and every member doing their duty by doing a turn on picket duties. We would not want any unpleasantness if we did win by people being accused of not pulling their weight."

He said this was a clear threat and an attempt at intimidation in a "most dictatorial, undemocratic and tyrannical manner."

The Prime Minister yesterday (Tuesday) denied a claim by Mr. Henk Vredeling, a vice-president of the Common Market Commission, that Britain had not approached the Commission for EEC financial aid for the BSC redundancies.

Docks pay talks adjourn without sign of a deal

BY GARETH GRIFFITHS, LABOUR STAFF

PAY TALKS between the two dockers unions and the London enclosed docks employers were adjourned last night until Friday with no agreement in sight.

The Port of London Authority forecast on Monday that work would be transferred from the Indian and Milwall Docks unless manpower reductions were speeded up and working practices improved. The Transport and General Workers' Union and the National Amalgamated Stevedores and Dockers Union studied the PLA forecast before yesterday's talks.

The threat of both official and unofficial industrial action faces the Enclosed Docks Employers' Association. There is little room for flexibility over the pay offer.

A 10 per cent new money and a further 2 per cent for manpower reductions of 500 has been tabled by the employers. The unions are claiming between 30 and 40 per cent.

The Riverside Employers in London will resume their pay talks tomorrow with the docks unions. The 900 Riverside dockers have already rejected a 10 per cent offer on basic rates and 17 per cent increase on bonuses.

Seven container ships were diverted last night from the Port of Liverpool by shipowners anxious that they should not be held up by an unofficial strike of 234 shoregang men.

The American Express Card

American Express Company announces that with effect from 1st February 1980 the fees for American Express Corporate Card accounts will become:

Enrolment fee per account £15.00
Annual subscription for each card . . . £12.50

A new scale of rebates reflecting the number of Corporate Cards held by a company is also effective from this date.

For established accounts the new annual subscription rate will be charged at the next membership renewal date.

American Express Company Incorporated with Limited Liability in the U.S.A.
J. S. Quayle, Resident Vice-President—United Kingdom and Ireland.

THE MANAGEMENT PAGE

OF THE 63 most senior executives who ran the Chase Manhattan Bank at the beginning of 1974, 26 are no longer with the company and several others have been shepherded away from the mainstream of the bank's management.

That fact alone is one dramatic illustration of the transformation that has taken place within the company, the third largest bank in the U.S., with total assets at the end of last year of \$65bn, and by common consent, the least effectively managed of the nation's giant banking institutions when recession struck in 1974-75.

The bank's weaknesses quickly appeared in its balance-sheet. Between 1975 and 1978 (inclusive) it was forced to write off close to \$1bn of (mainly real estate-related) loan losses. Net profit, which hit \$182m in 1974, slumped to \$105m in 1976. In that year it earned only 24 cents on every \$100 of assets, the worst performance of any of the top ten banks, according to data prepared by brokers, Salomon Brothers. In the same year Citicorp earned 69 cents per \$100 of average assets and J.P. Morgan 78 cents.

Last month, with the publication of its profits for 1978, the bank's executives clearly felt that they had put those dark days behind them. Net income topped \$311m, a 58 per cent increase, and average return on assets of 52 cents per \$100 at last brought it within shouting distance of its rivals. (Citicorp's figure was 58 cents.)

Rehabilitating Chase has clearly been a matter of personal pride for David Rockefeller, the chairman since 1969, and the man who, perhaps rightly, was widely criticised for having permitted the bank to develop under his leadership in a way which left it vulnerable to the changed economic conditions of the mid-1970s.

The timing of the recent announcement of Rockefeller's plans to retire from the bank is replete with symbolic overtones. From January 1 of this year, the beginning of a new decade, Rockefeller has passed over his chief executive functions to the bank's president, 53-year-old Willard C. Butcher. Rockefeller is staying on as

chairman but only until April, 1981. There seems to be no doubt that the decision is aimed at avoiding an abrupt transition. That Butcher is now in command of the bank is shown by one of the first decisions to be announced, namely that from January 1 the management committee has been dissolved, and the four top executive vice-presidents now report directly to Butcher.

Butcher, after 25 years with the bank, was named president in 1972, and the task of sorting out the problems which emerged in 1975 fell heavily on his shoulders. But it was not until the end of last year that the Chase board of directors decided that he would succeed Rockefeller, who will be 65 in June.

Dynasty

He presents a formidable contrast to the suave and genteel member of one of America's best-known business dynasties. A tall and heavy man, slightly stooping, he was described by Fortune magazine as having the look of "an earnest, agreeable buffalo." While perhaps capturing his appearance, that description probably does less than justice to his character. It is hard not to sense his latent power and to suspect that at times, like a buffalo, he can be anything but agreeable. Chase would not have recovered so quickly from the problems which befell it if Butcher had found it difficult to make hard decisions. Executives within the bank talk of a change of "culture" at Chase, which has made the institution more aggressive and less complacent. Butcher would seem to typify that change.

There can be little doubt that in the years during which Chase was fighting to recover its balance after the shocks of the last recession, it has laid ground to some of its competitors, both in the U.S. and overseas. Butcher himself concedes that the bank is not "blessed with an excess of capital" and at least in comparison with some of its rivals it has had to be satisfied with modest growth in its assets. Between 1974 and 1978 its com-

pared average growth of assets has been around 8 per cent, compared with nearer 12 per cent for Citicorp and Bank of America. Last year its assets rose by 6 per cent compared with 14 per cent at Bank of America, 21 per cent at Citicorp and 18 per cent at Manufacturers Hanover Trust.

It is, of course, well established in lending to major corporations such as IBM, General Electric and General Motors. Indeed, some of its competitors identified it as one of the banks most willing to shave lending rates in order to hold on to its market share in the past few years.

But the bank has lagged behind some of its rivals in developing a nationwide banking business outside this elite corporate market. Butcher, however, leaves no doubt that Chase is as anxious as its main competitors to take advantage of the gaps in U.S. banking laws. These are enabling the largest banks to escape from restrictions which have tended to hinder the expansion of banks beyond the boundaries of a single state. In part, it seems, he fears that unless the large U.S. banks penetrate this wider market they may be doomed to a slower expansion of their assets than their major international rivals, and that this will weaken their ability to compete.

He points out that the bank is now actively seeking to expand its capacity to service companies outside the ranks of the international giants. Last year the asset-based lending activities of the bank, which had been fragmented within it, were pulled together and a decision reached to "emphasise this business."

A new top executive for these

Chase Manhattan—a U.S. bank on a fresh course

BY STEWART FLEMING IN NEW YORK



David Rockefeller (left), chairman of Chase Manhattan, and Willard C. Butcher, who succeeded him as chief executive of the bank on January 1

operations within what is called Chase Commercial Finance, is shortly to be announced. With what is now a characteristic emphasis on marketing—identifying as closely as possible the services particular customers need and shaping the bank's ability to provide them—Butcher says he is not expecting to be able to supplant regional banks in providing basic cheque and loan services for medium-sized companies. But he clearly believes, as do his main competitors, that there is a market for specified asset-based services such as leasing and factoring for these companies, which their own local banks may not be able to provide.

He is also clearly anxious to build up a national consumer finance operation, a market

which Citicorp in particular has hit very hard, and one which other banks, such as Bank America, Continental Illinois and Manufacturers Hanover, are also developing through a variety of facilities ranging from credit cards and consumer finance to mortgage banking.

Butcher says that "the plastic card will increasingly become part of our strategy" but that he "has some scepticism" about mailing cards all over the country.

"You need something else, you need a matched strategy," he says, in order to get people to use a Chase credit card, perhaps tying it in to services at a particular store—something Chase is beginning to do. Another market the bank is tackling is home mortgages for the consumer through mortgage

banking operations. Chase has just obtained permission to open such a business in Florida.

One advantage Chase has as it seeks to expand from its New York base is that it is one of the few banks with the size and a nationally known name from which to develop. It is also a name which is known internationally and as Butcher describes it "one of the few banks in the world with international capability." In the early 1960s it set about building an international presence.

Indeed the international side of the business provided something of a crutch for the bank after 1975. In 1976, for example, international operations accounted for 82 per cent of net income. Between 1975 and 1978, while domestic lending was essentially flat,

loans at overseas offices grew from \$12bn to \$21bn, comprising 54 per cent of the total.

The bank is clearly concerned about maintaining a balance between domestic and international business, but Butcher says "the challenge is not to limit international earnings... but to increase domestic."

He is keenly aware, however, that the international side of the bank promises to present some formidable challenges. The bank, he says, is going to "improve dramatically" its capability in the analysis of both political and economic risk and in the countries where it lends money and the relationship of these forces to credit risk. For a bank the risk of lending on an aeroplane which will sometimes land in London is different, say, from a balance-of-payments loan to the same country. And he emphasises the importance of political analysis. "We do have political analysts in this bank and we are going to have more of them." They will help the bank operate in a less stable international political climate.

Just how important political judgment can be to a bank at the moment has been amply demonstrated by Chase's own involvement in the Iranian crisis. Its long links with the Shah of Iran and the personal relationship between Rockefeller and the Shah were factors which led to Rockefeller interceding on his behalf with the State Department and the President in order to help the Shah gain entry into the U.S. for medical treatment.

The repercussions of the Administration's decision to allow the Shah entry, led from the taking of the hostages at U.S. banks and then to a move by Chase to call a major syndicated loan to Iran in default.

Butcher vigorously defends that decision by saying that he has been disturbed by criticism from "junior executives" at banks overseas. He argues that Chase kept strictly to the legal conditions of the loan agreement and that from a U.S. point of view the country was technically in a situation akin to war in Iran, with its territory

there, the embassy, seized. The wisdom of the decisions Chase executives took in the Iranian situation has been a matter of debate, and too little is known to come to any firm conclusions on this question. What is clear, however, is that the issues raised for Chase were as much political and diplomatic as financial, and a bank needs executives capable of assessing both.

Butcher is clearly concerned about another looming international financial and political problem: the escalating OPEC surplus and the difficulties this presents to developing countries and therefore to the banks which played so prominent a role in "re-cycling" the post-1974 OPEC surplus. "There is some limit to how far we can go as the principal factor in the re-cycling," he says, adding that he advocates "closer coordination in the activities of banks with the efforts of the International Monetary Fund," and an increased capability for the IMF in this area.

Delicate

It is in his handling of issues which arise in this delicate area where Butcher's international political skills are tested. Butcher is generally perceived to be far from the greatest challenge. It is widely thought that one of the reasons Rockefeller, the consummate corporate statesman, is postponing his resignation as chairman until next year, is to give him an opportunity to smooth Butcher's passage into this world of international financial diplomacy.

It is an aspect of managing a large multi-national corporation which is becoming increasingly vital to the "bottom line" of profit and loss. In the emerging debate about the characteristics which the future top management of large companies should have, a common denominator is proving to be American business's sense that political sensitivity is a high priority.

Whether Butcher has, or can develop, the deftness of touch which will be needed to fill this aspect of Rockefeller's role at the bank nobody knows, perhaps not even Willard C. Butcher himself.

BUSINESS PROBLEM

Purchasing power of £

A lease states that the revised rent shall be such sum as is fair and reasonable having regard to and taking into account any reduction in the purchasing power of the £ sterling. What

index or figures do you think should be applied in a case such as this?

The provision relating to the purchasing power of the £ sterling may well be void for uncertainty, if no other guide is given to the interpretation of that phrase. If it has a meaning, the Index of Retail Prices appears to be a strong candidate;

BY OUR LEGAL STAFF

the £'s trade weighted index being another, but less likely, possibility. It is better to stick to one contention only in a case where uncertainty may invalidate the whole provision.

No legal responsibility can be accepted by the Financial Times for the answers given in these columns. All inquiries will be answered by post as soon as possible.

MANY a small company is managed in a "seat of the pants" fashion. The practitioners of this particular art swear by it, saying that it is the very lifeblood of the successful small enterprise. In particular, they claim that it promotes a strong camaraderie among the workforce.

But in these days of economic volatility, high interest rates, rapid technological change and intense competition in many areas of business, there is a good argument for suggesting that there is a place for more "professionalism" in small companies, particularly if they are growing fast.

If such a transition is to take place, the entrepreneur will either have to become an entrepreneur with management techniques, particularly financial and organisational, or be backed by people with such skills. Dr. Sue Birley, the author of "The small business casebook," is clearly of this opinion; she puts it across in her book in a strong, though subtle manner. She never actually resorts to presenting clearly outlined messages; rather she writes in such a way that they emerge on close analysis.

Her case studies of small firms with activities ranging from closed-circuit tele-

Small firms under a microscope

vision manufacture to oyster breeding, car manufacture and engineering consultancy. In each of them she gets across numerous messages: the need for a strong management team; the dangers of poor financial control; under investment and lack of capital; the problems of suffering from indecision on what to do in the market place, despite having an abundance of market information; and, of paramount importance, the need for the right people.

The point about entrepreneurial management is well illustrated in an analysis of Eaves and Washbourne, a small engineering company. A second-generation Washbourne, who had worked his way up through the company, was dismissive of management education—until he had experienced it.

"A salutary experience was the realisation that not a single person in the place could read a balance sheet," he says. "It was incredible how naive we were at the time. No one ever thought how much money we would make in the next 12 months or what machinery we were going to invest in."

The dangers of under-investment and lack of organisation in a highly competitive market are highlighted in the case of Gilbert Cars. This company was set up in the early 1960s to exploit the market for "special" cars that were provided in kit form for home construction, thus avoiding purchase tax.

Several weaknesses in the Gilbert set-up emerge in the study. The car bodies were made of glass-fibre and only one body mould existed, which meant that at best only one body a day could be made. Equipment was felt to be inadequate, leading, for example, to inaccurate cutting or distortion of the chassis welding. There were no detailed work schedules, so operators kept their own, in rough form. Operators also had to work overtime to make up for production lost when they had to double up as delivery drivers.

Despite the flexibility of the workforce, the company itself was essentially inflexible to basic change. It was satisfying a fashion in a very competitive market, but was clearly exposed to any shift in fashion or change in tax legislation.

The interest in Dr. Birley's

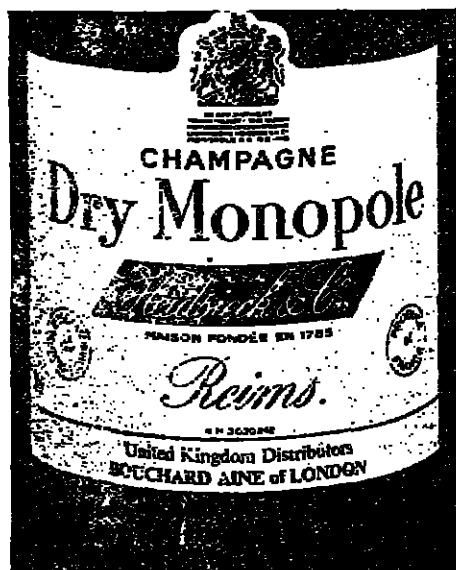
book lies not only in what it tells you, but equally in what it does not. Obviously, as a member of the London Business School's Institute of Small Business, she has a vested interest in promoting management education. But to her credit she plays the subject down.

Any reader of her book should not expect immediate enlightenment about small company problems and what can be done to resolve them. It needs to be looked at several times for its full significance to emerge. But this is well worth the effort.

The Small Business Casebook, by Dr. Sue Birley. Macmillan, £12.

Nicholas Leslie

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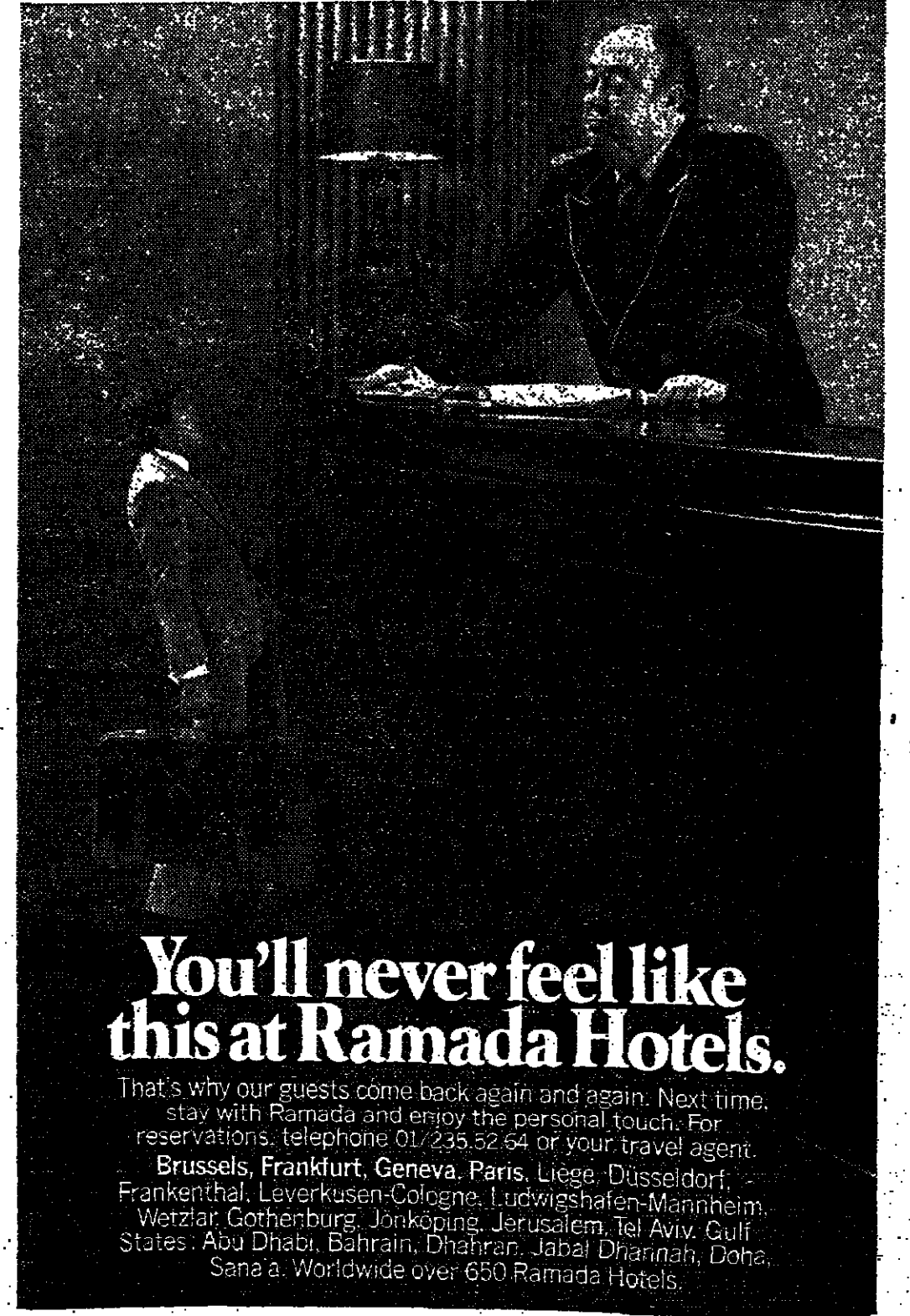
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JOHN LEE, MANAGING DIRECTOR, NEWPORT INSTRUMENTS.

Technical Page

EDITED BY ARTHUR BENNETT AND TED SCHOETERS

TELEVISION

Images on chips

IT CAN hardly be very long now before solid state image forming devices for television meet the definition requirements of the professionals.

Latest indicator is the announcement from GEC's Hirst Research Centre of what is claimed to be the largest charge-coupled device so far produced in the UK and possibly in Europe.

It measures 140 x 100 mm and consists of a matrix of 576 lines (the operational number of lines in a 625 line picture) each with 385 elements. The frame is thus compatible with 625 line systems and at 220,000 pixels represents a definition of about 67 per cent of a fully reproduced normal TV image. The system uses frame transfer read-out of the image signal.

The laboratories describe the new device as silicon based, with three phase, three level polycrystalline silicon gate buried channel technology. Advantages offered by such devices include small volume, no glass envelopes, and relatively low operating voltages; the first device runs on 15V at the moment, expected to drop to five volts with further development.

This compares with voltages hundreds of times greater used by conventional television

camera tubes.

The laboratories believe that immediate application for the devices will be in small size, lightweight, low power and rugged cameras for use in hazardous or difficult environments where conventional types would be unsuitable. Colour cameras would involve three of the devices with suitable optical colour filtering, although other techniques allow one chip to be used, albeit with lower definition. Hirst is believed to have such cameras operating.

Future developments under consideration include possible application in electronic news gathering (ENG) and ultimately an all-electronic replacement for amateur cine photography.

During the next six months the laboratories will be making a small number of devices available for early customer evaluation in the professional field. Depending upon the blemish specification the price will vary from £500 to £5,000.

The GEC announcement follows a statement from Sony reported in yesterday's Technical Page of a complete colour camera at £4,500 which also uses solid state image devices.

More from Hirst at East Lane, Wembley, Middx. (01-904 1262.)

VENDING

Mixtures not as before

SINCE MORE stringent fire regulations have been enforced, the use of electric kettles for tea and coffee making has been banned in most office and industrial environments. The clatter of china cups has, sadly, been dulled by the thud of heavily weighted polystyrene containers on the desk and factory bench since the vending machine has become a ubiquitous adjunct to our daily lives.

There is, too, a fierce prejudice against the automatic food and drink dispenser, and an encyclopaedia of customer complaints regarding peculiar admixtures when coffee tastes like orange juice, and tea is tainted with Bovril.

You will get what you pay for when you turn in to the Supernova (a variety of 33 hot and cold drinks) premises GKN Sankey, PO Box 6, Bilston, West Midlands (0902 29081).

This machine looks (and acts like) a computer in the corridor. Its logical simplicity can make friends with the most towering of intellectuals. Its list of 33 available drinks and their price tariffs are laid out for easy reading. A soft green light draws attention to the machine without being garish or

obtrusive. An electronic credit display is located to show a running total to the customer as money is inserted (an improvement necessary in noisy locations where coins cannot always be heard to be dropping within) and the "cup station" has been placed at a convenient height and position.

Two important features of the machine are its separate mixing bowls—it is now possible, assures the maker, to eliminate the unpalatable problem of flavour blur. The bowls also enable separate whiteners to be used for tea and coffee. A further bonus is the steam extraction system which is said to prevent ingredient contamination.

Offered as standard is a spare hygiene kit which includes tubes, whippers, bowls and an extractor hood, and the machine is backed by the company's comprehensive service which includes ingredients supply, maintenance and service.

The company also offers inflation proof rental terms through its own finance house, Sankey Finance.

DEBORAH PICKERING

AUTOMATION

Scans and records the readings

ABLE TO scan up to 1,000 temperature measurement channels at rates between one channel every hundred hours, and one every ten milliseconds, an intelligent logging system based on the Z80 processor has been put on the market by Ancom, Devonshire Street, Cheltenham GL50 3LT (0242 53861).

Using card modules, systems can be built up to suit the application; inputs can be from any standard temperature sensor with signal voltages conditioned and linearised by appropriate cards. Other boards deal with analogue to digital conversion, processing, and the connection of peripherals.

Interactive control of the system is by means of a VDU. A permanent record of all the results is obtained on a 24 column electrostatic printer including channel identification, time and measured value, maximum and minimum values and indication of any reading outside the pre-determined limits.

Supply of ingredients controlled

FEEDING OF ingredients to sugar confectionery manufacturing machinery can be very accurately controlled, says Baker Perkins, if its Autotest 148 microprocessor control unit is used.

Ingredients such as sugar, glucose, milk, water and fat can all be fed in the right sequence into a mixing hopper according to pre-set weights. A digital display of the weights is provided and a printout is available for stock control. Recipe changes are made by means of thumbwheel switches or a card reader can be used. Up to eight ingredients can be handled.

Baker Perkins is at Westfield Road, Peterborough, Northants (0733 262000).

NOISE

Motors can be muted

FROM ITS research resulting in a wealth of noise control data for the silencing of electric motors, it is able to offer silencers which encompass both acoustic requirements and essential criteria such as air flow, pressure drop and temperature rise, says Noise Reduction, 91, Leigh Road, Eastleigh, Hants (0703 611611).

One simple device which gave up to 10 dBA attenuation at the non-drive end and 5-7 dBA at the drive end of noisy motors on a pump complex is the slip-on mute.

Its simple and versatile design is said to cause little restriction to the airflow—the mute is not tight fitting, causes no recirculation, is easily removable for maintenance, and can be used indoors or outdoors.



Magnet Electrical Repairs, a GEC company, has recently commissioned this vacuum pressure impregnation (VPI) plant at its Bradford works, of particular interest because it employs epoxide resin impregnant. Shown is a stator about to be lowered into the vacuum chamber. The one-part epoxide developed in conjunction with resin suppliers has the necessary properties to allow it to be used for high voltage machines which

call for low viscosity and low dielectric loss to ensure good penetration and stability, and for random wound machines where high viscosity is needed to avoid run-off. Principle is that in the chamber, all the air is removed to prevent air pockets blocking the flow of impregnant into difficult cavities. The chamber can accommodate items up to 2.4 metres in diameter and 2.4 metres deep.

COMMUNICATIONS

Stops expensive phone calls

IN COUNTRIES other than the UK Norton Telecommunications has already sold over £200,000-worth of its telephone trunk barring unit, a device measuring only 8 ins x 5 ins x 1.5 ins which is wired between the exchange line access point and the telephone instrument and stops all but the authorised user from making outgoing calls requiring certain pre-programmed dialling codes.

Unauthorised — and highly expensive — subscriber dialled international and trunk calls are eliminated.

The device can easily be sealed to facilitate security checks and is operated by the authorised user with a key available in 75,000 different combinations. Requiring no regular maintenance, the unit is fitted with a dial tone detector and will operate on dialled digits

or on the signals produced by someone trying to tap in the digits on the receiver rest. An internal "number unobtainable" tone generator indicates to the user that he is trying to dial a barred number.

Supplied direct in the UK the unit would cost about £35, but Norton is at the moment trying to get approval from the Post Office.

Finds extension numbers

A CATHODE ray tube based device which might be of interest to company telephone operators enables any extension number to be found in under four seconds.

The system provides operators with immediate directory information on visual display units (VDU) and selections can be made from up to 23 listings on the screen at any one time.

Made by Lynton Communications, Downham Market, Norfolk PE38 9DX (03668 3719), the unit in its smallest L-3 form can store up to 4000 entries containing extension, surname, location and department.

Scrambles the telex

A SMALL unit introduced by Merck and Hollander, 11 Reading Road, Pangbourne, Berks. (Pangbourne 2151), takes a standard telex tape, reads it and encodes it into a new tape using an operator-entered code num-

ber. The encoded tape is transmitted on a standard telex.

Data is encoded in a way which involves both the data of the message and the key number defined by the user which provides, says the company, a possible number of code settings which is equal to two raised to the power of 56.

The unit is called Hi-Tex and is automatically programmed to adhere strictly to all the international and local telex protocols, so that any message sent will be "transparent" to the international telex switching network.

One of the devices is needed at each end of the line. Designed for an office environment, they are easy to use and can be installed in minutes, ready to work with existing telex equipment. In the decode or receive mode the scrambled tape is converted back to the original message.

A pointer to the security of this system is that, according to the company, a big computer would take 10,000 years to find the code.

Results of the research will be collated and analysed and a written report produced in English in five volumes: UK, West Germany, France, Italy and European summary (the latter available only to subscribers who purchase the complete study). The total cost to initial subscribers is £2,750 or £750 for individual country reports. Enquiries should be addressed to Industrial Aids at 14 Buckingham Palace Road, London SW1W 0QP. (01-828 5036).

SECURITY

Lights up the villain

ANY SECURE area can be illuminated by two 150 Watt floodlamps to the accompaniment of an ear-splitting 110 dB alarm using a sound actuated intruder alarm system called EK2 introduced by a new company called Existalarm of 32, Muswell Hill, London N10 3TR (01-883 0139).

The basic unit will sell for £295. Measuring only 280 mm x 150 mm x 160 mm and weighing 5 kg, it makes use of a solid state sensor which is described as "a solid state integrated circuit which can 'hear' an intruder."

The unit can apparently remember sounds to which it does not have to react and in addition it can be programmed to ignore accidental or unspecified sound although if this continues for more than 30 seconds the alarm is triggered.

No installation or service cost is incurred with the basic unit and no wiring is required. It is powered from the mains but has a rechargeable battery for a 48-hour standby period.

Areas up to 15,000 sq ft can be protected. In all "attack" situations (glass breaking, forcing of doors) it reacts instantly.

Intruders or faults detected

DEVELOPED JOINTLY by Unit Inspection Company (part of British Steel) and Thermal Imaging of Cornwall is the 8030 thermal/visual overlay camera.

It uses a pyro-electric vidicon tube, an infra-red device which does not suffer from the drawback of needing a supply of liquid nitrogen for cooling purposes. Images can be viewed on standard television monitors or can be recorded on videotape.

Applications are expected to include intruder detection, hot-spot sensing in industrial plant, measurement of heat loss from buildings and the detection of faults in overhead power cables.

The tube has been modified by the designers to permit quantification of the detected heat sources, achieved by the usual method of superimposing isotherms; it is claimed that temperatures can be resolved to one degree C. It is also possible to overlay the thermal image on to a normal visual image.

Temperature measurements may be made from the internal monitor, or after the survey from a tape. Aperture setting, grey scale and gain are continuously displayed on the monitor.

Unit Inspection Co., 1 Union Street, Kingston, Surrey (01-549 7411).

RESEARCH

Protection of crops

THE EUROPEAN crop protection pesticides industry is to be the subject of a major study by Industrial Aids.

Fundamental aim is to make an objective assessment of changing trends in market requirements for active pesticide ingredients / formulated products and raw materials, the direction and speed of technological developments in formulation and application, the capabilities and activities of competitors, likely acquisition opportunities and the potential impact of changing national and EEC regulatory requirements.

The study will be based upon field interviews with manufacturers and distributors of pesticides, basic toxicants and compounding ingredients, trade associations and regulatory bodies in the UK, West Germany, France, Italy, Benelux and Switzerland. In addition, there will be an evaluation of production and trade statistics, a review of the relevant international literature and an assessment of the positions of the major producers and their product interests.

Results of the research will be collated and analysed and a written report produced in English in five volumes: UK, West Germany, France, Italy and European summary (the latter available only to subscribers who purchase the complete study). The total cost to initial subscribers is £2,750 or £750 for individual country reports. Enquiries should be addressed to Industrial Aids at 14 Buckingham Palace Road, London SW1W 0QP. (01-828 5036).

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AGRICULTURE

Microwaves dry the grain

A MICROWAVE vacuum grain dryer, produced by McDonnell Douglas Corporation is under test by the U.S. Department of Agriculture at Tifton, Georgia. Production of dryers for a variety of industrial processes will begin this year.

McDonnell Douglas says that tests have shown that the dryer uses much less energy than conventional equipment when drying harvested crops. While conventional methods dry kernels sufficiently to prevent rotting, the hot air used usually hardens the outer surfaces making it difficult for internal moisture to escape.

The microwave system, says the company, heats the seed uniformly from the inside to the exterior and this prevents cracking.

Aeroglide Corporation of Raleigh, North Carolina, is subcontractor to McDonnell Douglas on this project. It is stated that manufacture of 100 kW units, much larger than the 12 kW prototype, will start by the middle of this year. With these units up to 1,000 bushels of corn per hour can be dried. More information about this development can be obtained from the UK from McDonnell Douglas at 66-68, Goldsworth Road, Woking, Surrey, GU21 1LQ (04383 71311).

STORAGE

Keeps it all tidy

MULTI-PURPOSE mobile shelving system in corrosion resistant stainless steel has been launched by G. F. E. Bartlett and Son, Maylands Avenue, Hemel Hempstead, Herts.

In order to reduce the cost of the Beaver units to its customers, the company will market them direct in an easily transportable knockdown pack complete with full assembly instructions and tools.

Available in four lengths, with plain or perforated shelves, the units will provide economical storage for almost any item from stationary supplies to laboratory equipment and food-stuffs.

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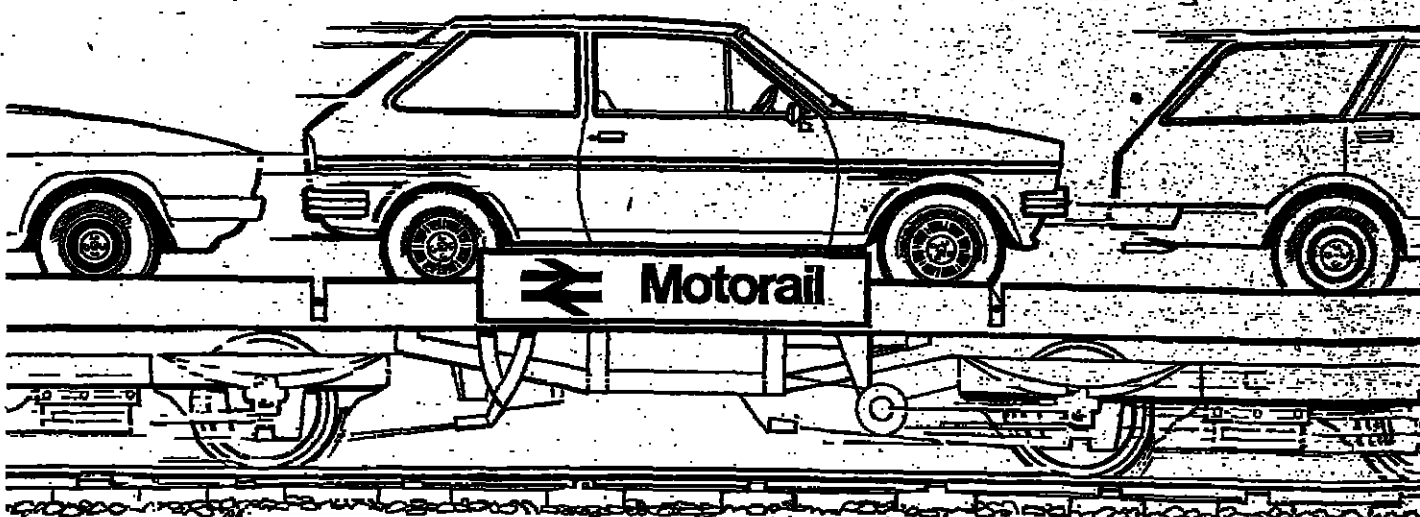
There are still some grants that are available for training in Initial Programming and Systems Analysis for this academic year.

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FINANCIAL TIMES SURVEY

Wednesday January 30 1980

World Railways

Capital spending rising rapidly

By Lynton McLain

RAIL TRANSPORT in the 1980s is forecast to remain one of the few high-growth areas for industrial investment in the non-Communist world.

Spending on capital equipment this year is expected to exceed £14.5bn in non-Communist countries, a rise of over 22 per cent compared with 1979. The figure does not include estimated investment in 50 major mass transit systems, which is likely to reach £3.2bn this year.

Inflation accounts for part of the rise. Nevertheless, multi-million pound projects for updating, expanding and improving the efficiency of railways abound in advanced Western countries and in the developing world.

A resurgence of the railway as potentially the most fuel-efficient form of land transport may be under way, but in Third World countries many railways projects are increasingly taking on the character, first and foremost, of prestige national projects, often with the primary object of opening up remote country areas.

However, wherever the projects and whatever the motivation of the builders, the schemes can be expected to provide a powerful stimulus for greater efficiency among world manufacturers of railway equipment as they vie for business. This in turn may eventually have an

impact on the operating efficiency of rail systems.

Europe, as the home of large scale rail networks, is again expected to dominate capital spending on railways in 1980, according to the latest annual world survey carried out by the International Railway Journal. European countries, excluding the Soviet Union and the Comecon countries, plan to spend more than U.S.\$10bn on capital equipment this year.

The United States is likely to be the single most important national market for railway investment in the 1980s. Capital spending on railways in the U.S. this year is forecast to reach \$5.5bn, a rise of 10 per cent compared with 1979.

However, although these two major economic zones are committed to increased spending on railways this year, the requirements of the two areas could not be more different.

Dominated

In the U.S., where freight dominates rail activity, more than 80 per cent of planned expenditure this year (about \$3.5bn) is expected to go on new freight wagons. The potential for foreign manufacturers is clearly immense, but the U.S. market remains dominated by domestic manufacturers.

In contrast, European countries are forecast to spend \$407m on new freight wagons this year, compared with a total of \$1,070m they are likely to spend on new passenger equipment.

A quarter of European investment on railways this year (\$2,235m) is planned to be spent on track modernisation and \$1bn is likely to be spent on the construction of new lines, especially in France, Italy, Germany and Spain.

In terms of equipment, the non-Communist world is expected to buy a total of over 1,000 main line locomotives, nearly 4,600 passenger coaches and 41,000 freight wagons this year.

West Germany dominates investment in railways in Europe and plans to spend a total of £1,219m on capital equipment and rail schemes

The world fuel shortage has resulted in a resurgence of the railway's importance. In Third World countries new rail plans have become prestige projects. Such schemes are expected to provide a stimulus to equipment manufacturers as they vie for business.

this year, making the country the biggest spender on railways in the non-Communist world after the U.S.

Dr. Wolfgang Vaerst, the first president of Deutsche Bundesbahn, the West German Federal Railway, defended this high investment in an interview with the International Railway Journal. He said that in comparison with other forms of transport in Germany, investment in Deutsche Bundesbahn had risen.

Federal Government subsidies and compensation payments for Deutsche Bundesbahn were expected to have reached DM 14.2bn (£3.59bn) last year compared with DM 10.6bn in 1979, when the network made a DM 4.4bn loss. Dr. Vaerst said he anticipated that the loss would have fallen to DM 3.5bn last year. The loss was expected to have fallen another DM 350m by the end of this year.

Losses are characteristic of most railways in Europe, and even British Rail, after three years of steadily improving performance, made a loss of almost £10m in the first half of last year.

In terms of investment, Britain comes low down the league table—it is in ninth place in a list of non-Communist countries outside the U.S.—and plans to spend £316m on capital equipment this year.

One of the problems which hit state-owned British Rail and almost all other rail operating companies last year was rapidly rising fuel charges. Partly as a result, in Britain at least, the clamour for more widespread electrification schemes grew.

An interim report of a joint British Rail/Transport Department study on rail electrification was published last year and



An Amtrak train in the U.S. with some of the new Amfleet cars that are replacing older, less comfortable equipment

the full report, with an economic evaluation of the options now being studied, is expected to be published in the spring.

Generally, the pro-electrification lobby favours more schemes on the grounds of cheaper maintenance and lower running costs than are possible with a diesel-powered system.

British Rail, with Société Nationale des Chemins de Fer Français (SNCF) also has ideas about building a single bore rail-only tunnel under the English Channel. The project as defined in an initial study would cost about £650m and, according to British Rail, may yield a return of about 15 per cent on capital employed.

The scheme cannot go ahead without the backing of the

British and French Governments. Mr. Norman Fowler, the British Transport Minister, has not made his position on the issue clear and is waiting until an advisory report, from Sir Alec Cairncross, is presented, possibly before the end of February.

Benefit

Europe's railways may benefit from a tunnel—or bridge—across the English Channel and, partly with this in mind, the European Commission has started, after much talking, to move towards a "transport infrastructure" for the nine members of the EEC.

The Commission published its Green Paper in November, with ideas for discussion on a proposed infrastructure plan.

However, whatever the attractions of a fixed rail link across the English Channel, Britain's rail network has other high priority candidates for investment.

These include 60 sets of the potentially world-beating 150 mph electric advanced passenger train to be in service by the mid-1980s at a cost of £150m, and the much overdue replacement of ageing passenger rolling stock on the busy commuter routes in London and South East England.

The British Government, with British Rail's support, has insisted that each candidate for new investment meets an agreed financial target for return on capital. In the case of the APTs, as with other Inter-City investment, the requirement is a 20 per cent return on capital.

The targets are designed to encourage British Rail to operate within an agreed external financing limit set at £750m for 1980-81. This includes all investment, grants from local authorities and central Government support for socially essential services, such as those in the commuter areas.

In the financial year to the end of March, British Rail approached close to breaching its current external financing limit of £715m. To stay within the limit, British Rail on January 1 ordered minor cuts in the capital spending programme. Railwaymen were told that they would have to wait for a bonus which had been promised.

These tactics are likely to have set an unhealthy precedent for British Rail in its bid to remain within the cash limit set by the Government and one

which has important implications for rail equipment suppliers.

The cuts became inevitable partly as a result of the problems the railways faced in Britain last year. These included the £15m cut to £715m in its financing limit, rising fuel charges, sluggish demand for freight services and the consequences of a self-imposed freeze on passenger fares for the whole 12 months.

But the cuts were also made unavoidable because British Rail made no progress on the desperately-needed improvements in productivity called for in the BR paper "Challenge for the '80s" — issued to the rail unions in November and the second such paper on productivity in less than four years.

British Rail Research has done some advanced work on ways in which technology can help improve productivity. The possibilities include automatic, driverless freight trains, although British Rail's proposals to the unions' stop at the "remote control of locomotives on merry-go-round workings at power stations."

Encouraging

Some of these ideas may find their first applications overseas and one of the most encouraging railway developments last year was the five-year agreement signed between Britain and China for railway and scientific co-operation.

Mr. Guo Weicheng, China's Minister for Railways, signed the agreement with Mr. Norman Fowler, his British counterpart, after a two-week visit to Britain's rail industries.

The countries are to co-operate in modernising China's 31,000-mile rail network.

Japan has already signed a similar contract with China, but

RAILWAY INVESTMENT 1980

The Top 10 Non-Communist countries outside the U.S.

West Germany	£1,219m
South Africa	£786m
France	£740m
Nigeria	£534m
Italy	£476m
Belgium	£389m
India	£370m
Spain	£355m
Britain	£316m
Turkey	£264m

Source: International Railway Journal

The British development calls for specific, detailed co-operation on a project to electrify almost 100 miles of track between Hong Kong and Canton; the use of marshalling yard equipment for controlling rolling stock; track cranes and the exchange of skilled and scientific staff.

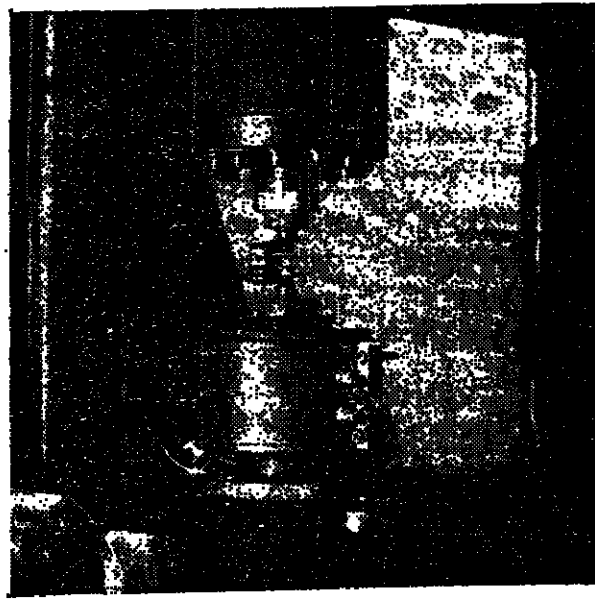
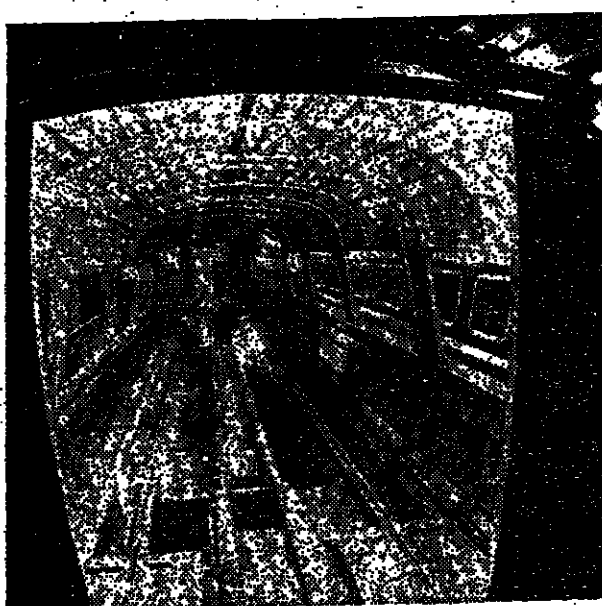
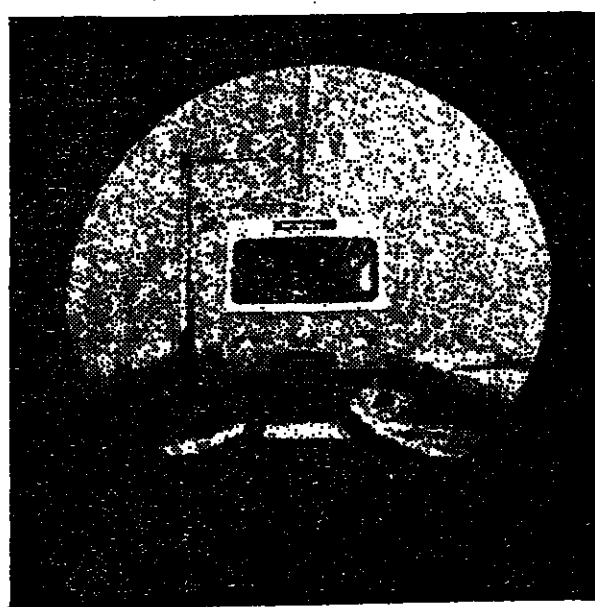
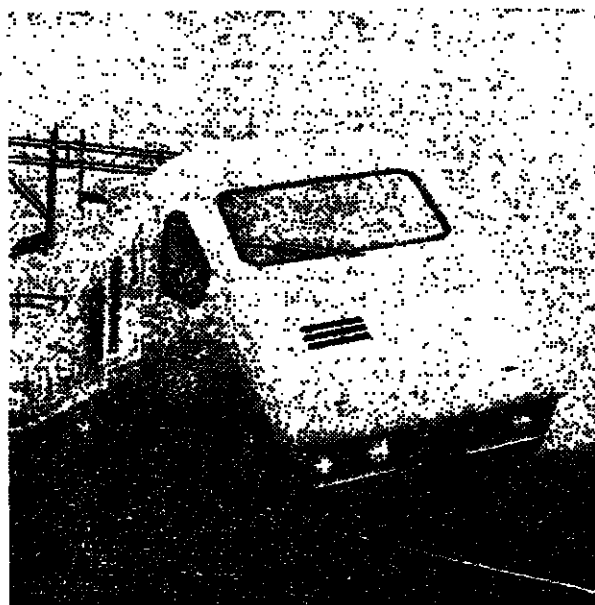
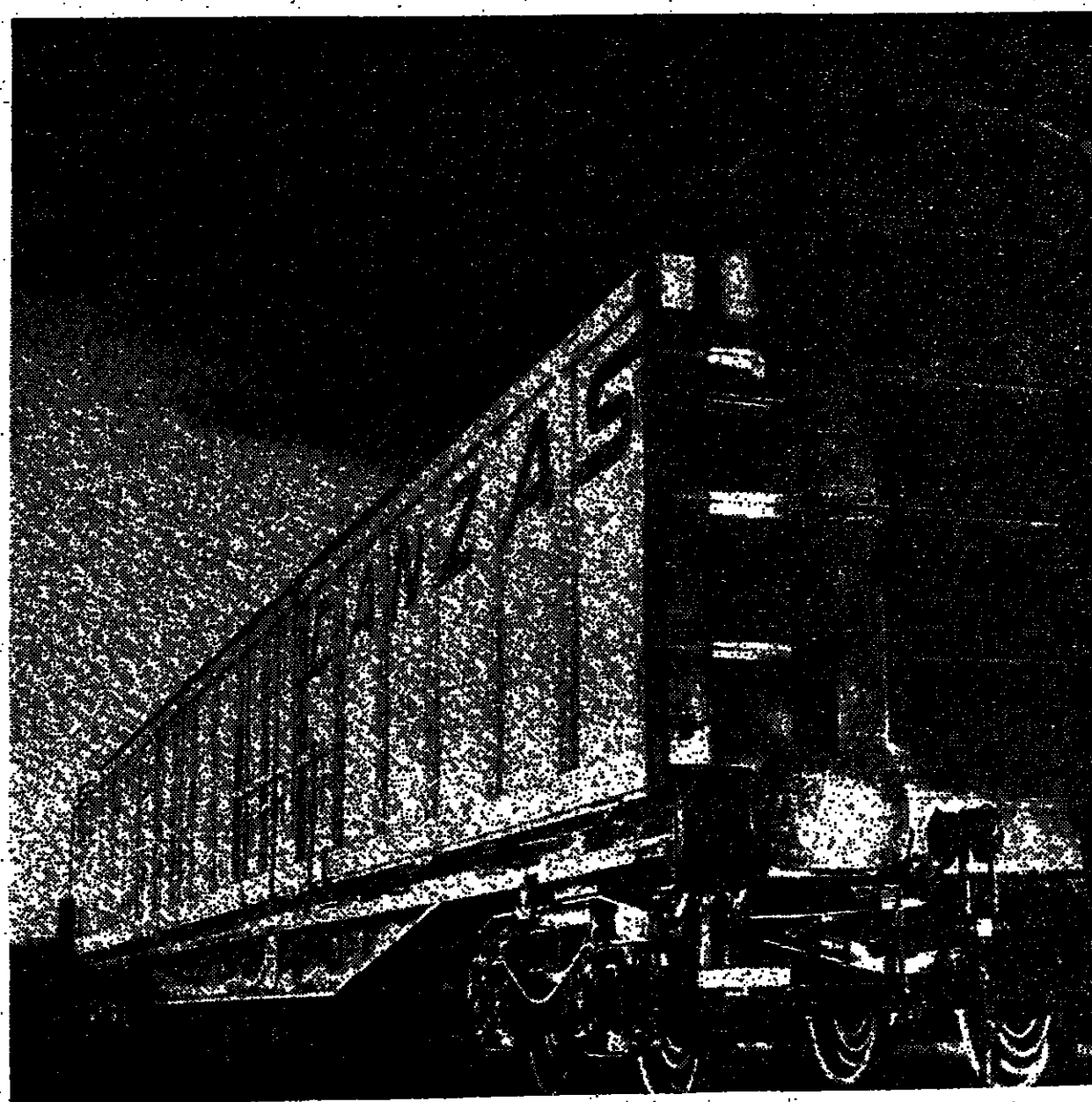
A British Rail mission to China—the second in less than a year—is to visit the country in February for further talks. These may involve the possibilities of supplying containers, suburban rail systems and automatic train systems for power stations.

Success in China will open up a vast new market for the rail equipment manufacturing industries of the world. Competition for some of the major contracts likely to emerge will be intense.

However, only those countries that can offer sound commercial terms with low interest, long-term finance, an appropriate level of technology and the experience of efficient, well-managed railways in their home markets are likely to succeed.

ON OTHER PAGES

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Wagon building	II	India's system	IV
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Track/signalling	III	Mass transit	V



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WORLD RAILWAYS II

Freight systems in trouble

THE ENVIRONMENTAL lobby in the transport world — those who favour a massive move back to the railways of freight now carried by road — must be disappointed by the desultory impact the rapid rise in fuel prices has had on freight transport.

Since the Middle East war of 1973, which marked the start of escalating fuel prices, the movement of goods by road, in Britain at least, has increased, largely at the expense of the railways.

Government figures show that, in 1973, road haulage accounted for 90.4bn tonne-kilometres. Rail accounted for 25.6bn tonne-kilometres.

But by 1977, the latest available figures, road transport accounted for 98bn tonne-kilometres, while rail had dropped to 23.8bn tonne-kilometres, over a period when the total movement of goods had increased from 141.4bn to 152bn tonne-kilometres.

These figures are disturbing for railwaymen. But even more worrying are the tonnage figures, which show that the road haulage sector's carryings dropped from 1.672bn tonnes in 1973 to 1.422bn tonnes in 1977. When these tonnage figures are considered with the "movement" figures, they show that road hauliers, in a period of rapidly rising fuel prices,

started to carry goods over longer distances.

This marked a substantial inroad into the one sector where rail freight is traditionally supposed to score over road: long-distance hauls.

In fact, rail freight tonnages and their movement have both been falling, with occasional short-lived reversals of the trend, for the past quarter of a century in Britain.

For British Rail these developments are still its legacy despite far-reaching, almost revolutionary, changes in the way freight is handled on parts of its network.

More automation has been introduced to the railways, with higher speeds, less single-wagon working and more container traffic, operated by the Freightliner subsidiary of BR. And BR has developed advanced computer techniques for its Speedlink wagonload freight transport system.

The first of the air-braked wagons operated between Bristol and Glasgow eight years ago. The government of the day eventually approved a substantial investment programme for a full national Speedlink service.

Another target for British Rail is for this service to eventually replace completely the traditional mixed trains of wagons, some of which still operate out of obsolete marshalling yards.

Brief calls

Speedlink trains do not get shunted into marshalling yards on the journey. They call only briefly at a few, strategically planned junctions to attach or detach wagons.

British Rail describes Speedlink as "the freight system of the future," and it also operates an advanced computer system, the TOPS Total Operations Processing System.

TOPS is a real time computer system which enables BR managers to monitor and control continuously the movement of wagons.

However, the irony of British Rail's involvement with computer technology on the freight system is that it has to operate alongside the largely redundant marshalling yard system it is designed to replace.

British Rail would like to phase out and eventually close completely most of the 458 rail freight terminals and the 38

wagon marshalling yards, which will not be needed with the Speedlink system. These are a drain on the financial resources of British Rail, which has been set by Government an agreed target for the financial return to be achieved by the freight business.

Instead, as well as expanding Speedlink further, British Rail wants to concentrate more on developing specific freight routes for intensive use by bulk raw materials, fuel and container trains.

Serious trouble

The freight business broke even for the first time in 1978, but it is known to be in serious financial difficulties once again. British Rail is reluctant to publish its financial target for freight, although the target for the Inter-City services is known to be a 20 per cent return on capital employed.

The general guidelines for the freight business, however, are understood to be a requirement that it covers its own investment needs from revenue and from grants on a replacement basis at current cost. This would be after meeting the direct and indirect costs of the rail system and after paying the freight share of interest charges.

The practical difficulties are immense, particularly at a time when there is no sign of a move away from road freight.

At the moment rail is only competitive for "collection and delivery" general freight traffic over distances greater than 400 miles if wagon repair and other costs are included. When the provision of new rolling stock is taken into account the cost advantages of rail become even more distant, as the capital costs broken down for each journey are considerably higher for a rail wagon than for a new 32-tonne lorry.

British Rail is acutely aware of the need for improvements in productivity on its freight system. It has discussed a broad strategy with the rail unions, but one of the major obstacles is BR's insistence that "excess marshalling yard capacity must be eliminated."

Remote control of trains is also a possibility for improved efficiency.

However, British Rail is not the only rail network in Europe suffering from redundant marshalling yards. The Deutsche Bundesbahn, West Germany's national railway, hopes to cut

the number of yards from the current total of 135 to 50 in the early 1980s.

In Belgium, the SNCB national rail operator is attempting to come to terms with a Government call to abandon much of the traditional and inefficient wagonload and small volume freight business.

The Government wants the railways to cut the existing 440 freight depots to 250, to stop the use of many private sidings, cut the number of marshalling yards from 35 to 10 and to concentrate on full trainloads.

In Japan, home of the advanced high-speed Shinkansen passenger rail train, the freight business of the railways is in serious financial trouble. Since the late 1960s, Japan National Railways share of the country's total freight transport has dropped from about half to 12 per cent.

The steady exhaustion of natural resources, especially coal, is a major factor in the decline. The substitute of imported coal has not made up the decline because so much industrial activity is now on the coast of Japan and short road haulage and coastal shipping is the most competitive means of transport.

But where Japan has succeeded in making progress on its rail freight systems is in the use of single commodity train working.

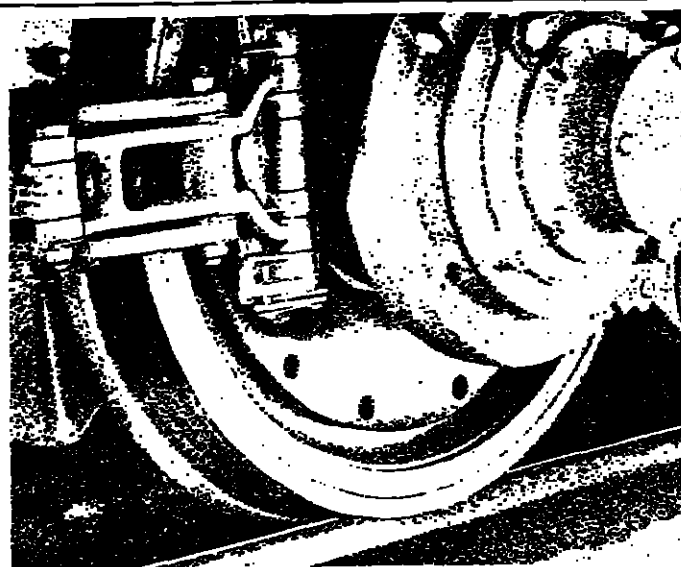
Japan also has a computerised freight handling system and has extended it to its container depots for controlling crane operations.

Perhaps not surprisingly, a high point of even the depressed freight system on Japanese railways is the use of advanced technology to attempt to solve problems. In particular,

Japanese National Railways is planning the near full automation of marshalling yards. The main yard for the Tokyo area has already been automated.

Despite the benefits that may come from such a degree of automation, Japanese National Railways is still beset by constraints which may prevent freight becoming viable in the near future. Constraints include the traditionally paternal attitude of Japanese employers — including JNR — to their employees, which means that natural wastage is almost the only way to reduce the total labour force.

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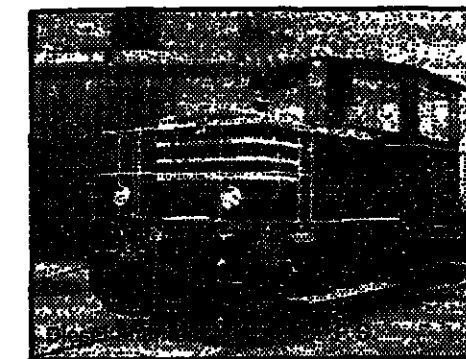
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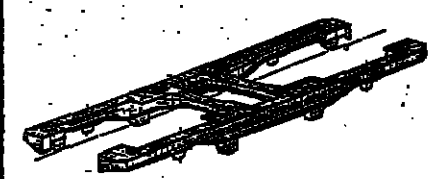
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THE MANUFACTURE of rail freight wagons this year for countries outside the U.S. and the Communist bloc is expected to total more than \$500m out of a total expenditure on railway equipment expected to exceed \$7.6bn in the same period.

A high proportion of the planned spending on freight wagons is likely to be made in the developing world, with Mexico leading the field with a major equipment programme totalling more than \$89m in wagons alone. Bangladesh has plans to buy \$44m-worth of wagons.

However, other, more developed nations, including South Africa, which plans to spend over \$60m, and Turkey, which is to buy \$40.4m-worth of wagons, are also clearly excellent markets for the growing band of manufacturers.

In Europe, West Germany has the largest purchase plans with hopes of buying \$48.5m worth of wagons. Spain is looking for \$36.9m-worth of wagons and France \$25.5m, while

Britain expects to buy \$22.6m-worth. France has a powerful wagon-building industry based on companies such as Famen-Girel, CFMF, and SNAV.

Elsewhere demand is scattered, but includes most of the developing railway companies in the West. Japan is notable for the absence of plans to buy wagons this year, almost certainly a reflection of the downturn in demand for rail freight services and poor viability of the country's rail freight system.

However, problems of running a viable rail freight network are not restricted to Japan. In Europe, the Union Internationale des Chemins de Fer (UIC) — has figures which show that demand for rail freight transport in most of the leading European nations has remained near-static since the mid-1950s.

In some countries such as Britain, however, the movement of freight by rail fell from 25bn tonne kilometres in 1965 to

an estimated 19.9bn tonne-kilometres in 1978.

This was by far the greatest fall and compares with the rise in rail freight movements recorded by France, Belgium, Italy, Denmark, Ireland and Luxembourg.

The total for all European railways, including those in East European states, rose from 433bn tonne-kilometres in 1965 to 535bn tonne-kilometres in 1977.

The West German federal railway hopes to triple the volume of freight transport carried by rail by 1985, so it is probably safe to assume that as the target date approaches more of its investment in wagons will be in equipment to increase the total size of the fleet. West German wagon makers include Waggonfabrik Talbot and Linke-Hofmann-Busch.

However, Britain's Railway Industry Association, which represents 40 member companies including wagon builders, believes the world's rolling stock industries may now be faced with over-capacity as their own production lines.

India has at least nine companies, including Steel Industries, BEM, Bura Standard and Climco International, which produce locomotives, coaches and wagons. Korea, also a developing force, has four main companies, including Hyundai and Korea Shipbuilding and Engineering Company producing wagons, coaches and locomotives.

Powerful

The East European countries are also increasingly powerful competitors, with Poland, Czechoslovakia and Hungary among the main producers.

In Europe, Britain remains one of the leading producers, but France dominates some markets, particularly in French-speaking African countries, although Algeria and Morocco are attempting to become more independent of external supplies.

Britain's wagon and rolling stock industry has a strong nationalised production sector and a private sector which is strong in specialised products and markets, but somewhat fragmented.

The nationalised sector is British Rail Engineering (BRE), a subsidiary of the state-owned British Rail Board. The company had a turnover of about \$400m last year, but only about 10 per cent of this is either export work or work for

private companies. The rest is repair work for British Rail (49 per cent of turnover in 1978), parts supply and service work (18 per cent), new locomotives and rolling stock for British Rail (24 per cent).

British Rail Engineering sold more than 500 wagons overseas in 1978 and earned export orders worth almost \$50m. The subsidiary expects to make 1,000 wagons at its Ashford works this year of which 90 per cent are for export. The Shildon works is to produce 1,800 wagons, which will include 100 for private companies.

The private sector of the wagon and rolling stock industry in Britain is dominated by a number of medium-sized companies, including Procor (UK), Standard Rail Wagon, Metro-Cammell, Gloucester Railway Carriage and Wagon Company, W. H. Davis and Sons and the Powell Duffryn Wagon Company.

Private share

British Rail Engineering and the private sector manufacturers may get the chance for greater co-operation if tentative plans now being considered by the British Government are carried out. Mr. Norman Fowler, the Transport Minister, is considering the future of British Rail Engineering and may try to encourage private investors to take a share in the company.

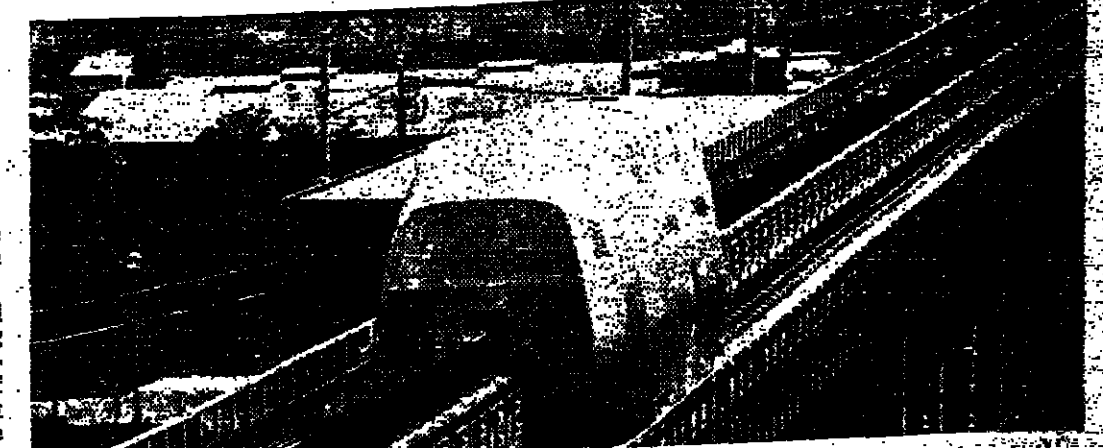
This would have the effect of breaking BRE's position as monopoly supplier to British Rail and may please sections of the British Rail Board which would like to open some of its equipment requirements to the private manufacturers in the light of previously poor labour relations and deliveries at BRE workshops.

However, the latest figures from BRE show that the production lost through industrial troubles fell last year to 25,328 man-hours compared with 486,757 man-hours in 1978.

As a result, the proportion of repairs called for by the BR Board which were delayed fell, in the case of locomotives from 7.8 per cent in 1975 to zero last year; for wagons from 18 to 5.2 per cent and rose only for coaches by 0.5 per cent to 11.1 per cent.

These improvements, if maintained, may make BRE attractive to private investors, if the Government goes ahead with its ideas to divest the railways of those activities not directly connected with running the railways.

L.M.C.



Japan's ML 500R experimental linear motor vehicle undergoing tests at the Japanese National Railway Centre at Hyuga. Its target top speed is 310 mph.

Research bolsters export markets

RESEARCH INTO railway technology in the leading European industrial nations and Japan has assumed considerable new importance in recent years, for at least three reasons.

The root of the requirement for continued research is the common problem facing railway administrations around the world: the need to raise productivity and to use existing resources — technical and human — more efficiently.

New technology, particularly when applied to existing railway equipment, is increasingly seen as a cost-effective way of raising productivity. Cuts in maintenance requirements — which are traditionally labour-intensive — are often a fundamental target of applied research.

A second, less obvious reason for the rising importance of research and new technology is the growing need for prestigious national projects. These are regarded increasingly as essential back-ups for a country's rail equipment industry, where the products may be less exciting, but vital to keep domestic workshops busy.

In particular, the development of high speed trains — in Britain, France, Germany and Japan, for example — has started to assume an importance beyond economic and operational reasons linked with passenger appeal. They are seen also as demonstrations of excellence in engineering which will help the export efforts of a nation's rail industry in general.

The third reason for continued research is the spin-off for all

aspects of the rail business. Britain has an excellent example of this in the so-called "cross-braced bogie" now being marketed by British Rail Research and Development and the private sector, Gloucester Railway Carriage and Wagon Company, for the developing world, in particular.

The bogie is a direct spin-off from the years of work carried out into the dynamics of high speed rail vehicles by British Rail at the Railway Technical Centre, Derby.

The electric advanced passenger train now under test by British Rail was the major product of this research, which enabled a 150 mph passenger train to ride safely at high speed on existing track, despite curves which would otherwise require slower running.

For the developing world, the cross-braced bogie may, in a less dramatic way, help passengers and freight trains negotiate bends safely at higher speed and with less wear on track.

The search for higher speeds dominated much of Japanese rail research in the 1960s and 1970s. One of the results, the Shinkansen high-speed "bullet" train, has been a success.

The losses of the first year, 1965, when expenses exceeded revenue by 23 per cent, have been replaced by operating profits, although the margin has fallen compared with 1973, one of the "bullet" train's most successful years, when expenses accounted for 46 per cent of revenue.

The reputation of Shinkansen has had an effect, in competitive

overseas markets for other rail products, in enhancing the status of Japanese rail technology, despite the continuing and heavy operating losses of much of the rest of Japanese National Railways.

In France, research into high-speed trains has also given the Société Nationale des Chemins de Fer Français (SNCF) a reputation for engineering excellence which is carried over into other, less prestigious fields of railway equipment production. The 163 mph TGV Paris to the south-east express train is expected to start full-scale test running on the new line in June or July.

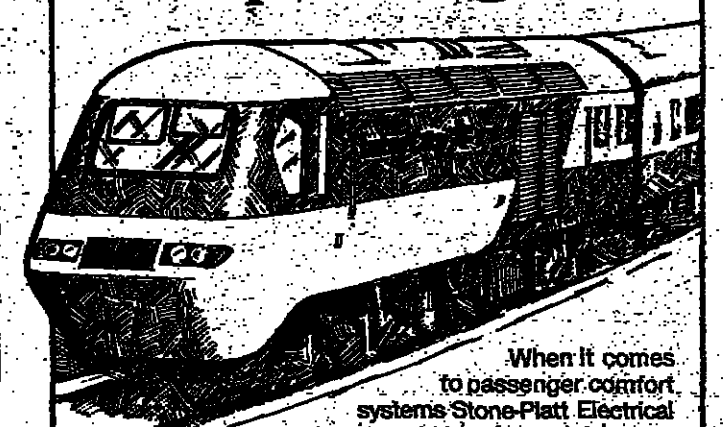
Britain's 150-mph advanced passenger train — which, unlike the French TGV, is able to use existing track because of its ability to take bends at speed — is to enter passenger service in May. By then, the Government should have received British Rail's request for a full fleet of 60 APTs, to be in service by the mid-1980s between London and Glasgow.

British Rail is determined to prove its case to spend the estimated £150m required. Much is at stake, for BR is already facing stiff competition on the Glasgow route from British Airways and believes it has exhausted the growth potential of its existing 100-mph electric service on the route.

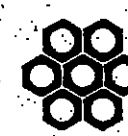
The continued success of Inter-City is regarded by BR as essential for the future of much of the rest of its network.

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L.M.C.

WORLD RAILWAYS III

Increasing demand for electric locomotives

WITH THE NOTABLE exceptions of India and China, the worldwide transition from steam to diesel and electric locomotives is all but complete. True, there are still steam locos around, but in terms of tonnage hauled their contribution is negligible.

But to work out the size of the market for replacement locos it is not yet possible to divide the total number in service—about 180,000—by an average life of, say, 25 years to arrive at an annual production of 7,200 units a year. For a number of reasons the actual figure is somewhat less—between 5,000 and 6,000—although this still represents a total annual investment of well over \$2bn.

First, there is a marked trend towards higher power. America has standardised on 3,000 to 3,600 hp but still has many thousands of 1,500 hp locos among the 28,000 in service; thus the total is static even though the tonnage hauled is rising.

Second, a fairly rapid process of concentration is taking place within rail freight, the sector in which the vast majority of locomotives are employed. Trains become heavier and marshalling yards larger but fewer in number.

Largest builder

Third, the world's railways are being electrified at the rate of nearly 5,000 km a year, especially in the Soviet Union—by far the world's largest builder of electric locomotives—which is producing more than 400 a year. Here units of 8,000 and even 10,000 hp are each replacing three or four diesels.

Add to this a trend in the passenger business away from locomotives towards multiple-unit trains, and it could well be the case that in terms of numbers locomotive production has peaked. Gross horsepower, however, is certainly at record levels and may climb further in the 1980s.

Although the Communist bloc has a very large proportion of total manufacturing capacity,

producing 2,500 diesels and 700 electric a year, it is largely a self-contained market with little impact on the outside world.

The Electro-Motive Division of General Motors dominates the non-Communist world because of the size of the American market. The 1,900 locomotives (some were rebuilds) bought by U.S. railways last year was the highest total since 1953. EMD has about 75 per cent of this vast market, and therefore is able to impose a degree of standardisation on its customers both at home and abroad, that European competitors can only envy.

Last year EMD turned out 1,826 diesel locomotives from its highly-automated plant at La Grange, Illinois, using its famous 645 two-stroke engine. EMD has exported to 55 countries and established subsidiaries, such as General Motors Canada, which competes successfully with its parent—securing business recently from the Ivory Coast and New Zealand.

But U.S. General Electric, squeezed in its home market as far as EMD dares without attracting anti-trust action in the courts, is especially active overseas. Apart from direct exports, there are subsidiaries like General Electric do Brasil which exports to Portuguese-speaking Mozambique as well as to Uruguay, Chile, Bolivia and Argentina.

In Canada, Bombardier takes the lead in locomotive exports using designs that originated with Alco (the American Locomotive Co.). Japan's exporters have been badly hit by the high value of the yen, and few orders have been won in recent months by the principal builders: Hitachi, Mitsubishi and Kawasaki. Biggest order on the books is 50 electric locomotives now being delivered by Hitachi to South Africa.

Rail freight in Japan has lost out to road and coastal shipping, and multiple-unit cars are favoured for nearly all passenger work. Thus the home market for locomotives has almost disappeared.

British builders suffered a

similar setback in the 1960s, when the feast of orders following the 1955 decision to switch to diesels in a hurry was turned suddenly into a famine by Dr. Beeching's arrival as Transport Minister in 1961. Private sector capacity to build main line locomotives was virtually eliminated.

British Rail's workshop subsidiary, BREL, fulfils domestic requirements, currently producing 20 locomotives a year. Companies such as Hunslet are still building shunters; indeed, Hunslet and BREL joined forces three years ago to supply 35 shunters of 525 hp to Kenya.

As a supplier of diesel engines and electrical components, GEC also maintains a strong interest in locomotive manufacture, but export bids involve teaming up with an overseas builder.

Important orders

Union Carriage of South Africa has built electric locomotives as sub-contractors to GEC on two important orders: for Taiwan, and a new 800 km iron ore line in South Africa electrified at the rare voltage of 50 kV.

GEC also secured a major electrification contract three years ago in Brazil which includes the supply of locomotives to haul 12,000-tonne ore trains. To build them, a new plant was to be set up locally in partnership with Villares. Unfortunately, GEC's contract has been bedevilled by indecision as to which routes should be electrified and work on the locomotives has not started.

There is concern over BREL's failure to meet production targets to provide British Rail's motive power, and every expectation that a big 20-year electrification programme will be authorised later this year that will create a steady demand for locomotives.

In any event, the 2,000 main-line diesels built for British Rail between 1956 and 1963 will be life-expired in the 1980s, so there is bound to be a requirement for between 50 and 100

locos a year in the medium term.

Hawker Siddeley's subsidiary, Brush, is creating new manufacturing capacity in the hope of cashing in on this prospective demand, and this would place Britain once more in a position to export complete main-line locomotives.

Like the Japanese, German builders have been hard hit by a strong currency. France has been more successful, exporting 300 locomotives in the four years 1975-78, mainly to the former French colonies which remain remarkably faithful. Alstom of Belfort dominates the industry here.

The big question for the future is whether the switch from diesel to electric traction stimulated by successful oil crises will weaken the remarkable grip which EMD has established on the rather limited sector of the locomotive market which is truly competitive.

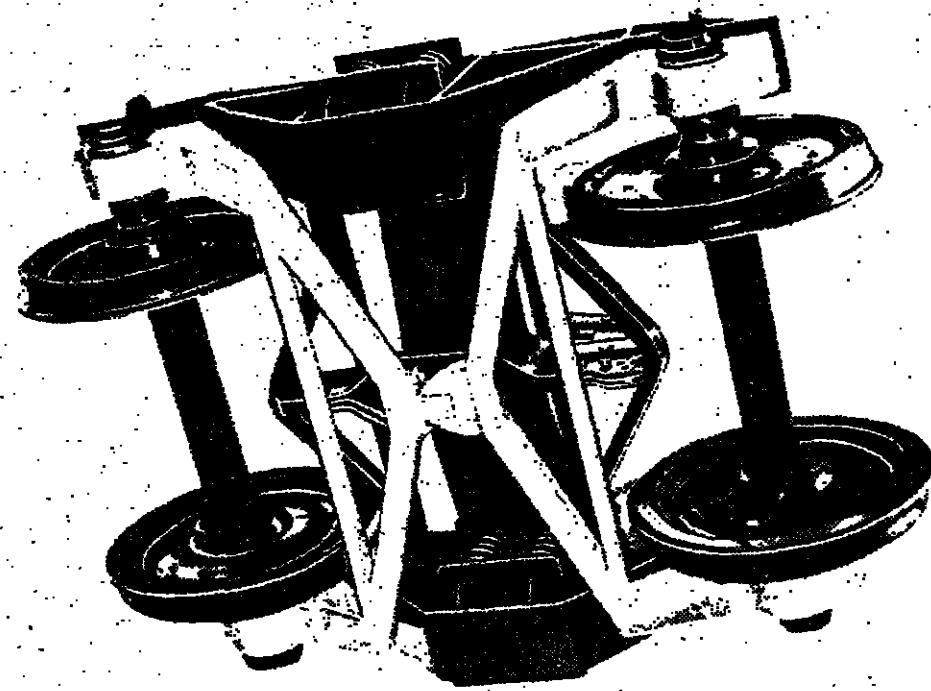
It was ruthless standardisation and a dedication to mass production unusual in the railway industry which put EMD in the lead, but the Americans are a long way behind Europe when it comes to electric traction. Where EMD builds a 3,000 hp diesel for \$1m, the ASEA-designed electric is costing Amtrak more than \$2m each. In Europe, however, an electric loco is about 25 per cent cheaper than a diesel, as one would expect since there is no costly prime mover.

There is little doubt that demand for electric locos will grow as diesel business declines. Because of differences in power supply it is more difficult to design and market standard electric locos, but standardisation of components could go a long way.

There is good business to be done by companies which can supply proven electrical equipment at a competitive price, even though governments increasingly wish to see locomotives built within their own borders.

Richard Hope
Editor, Railway Gazette International

THE NEW CROSSBREED

Great on curves
stable on the straight and narrow

The 'crossbreed'—a revolutionary design of cross braced freight bogie—is the most significant development in rail freight transport in recent years.

Developed from research on BR's new Advanced Passenger Train, it breaks new ground in overcoming the problems of instability at speed and wear on wheel flanges and track.

The bogie is being marketed jointly by British Rail Engineering Ltd—the manufacturing arm of BR—and Gloucester Railway Carriage and Wagon Company Ltd—Britain's major exporter of bogies.

X BRE-Gloucester

British Rail Engineering Ltd, Derwent House, Railway Technical Centre, London Road, Derby DE2 8UP
Gloucester Railway Carriage & Wagon Company Ltd, Bristol Road, Gloucester GL1 5RS

Big spending on new track

TRACK, PERMANENT way and signalling are among the most vital areas of rail technology in terms of world trade and because technical standards in these areas often determine the level to which a country's railway technology, as a whole, can aspire.

A measure of the importance of these industries is given in the latest available figures on world railway projects. A poll from 44 developed and developing nations taken towards the end of last year by the International Railway Journal, shows that these countries expected to spend a total of almost \$3bn this year on new railway track, improvements to existing track and on signalling systems.

This total of £1,126bn for new track, £1,343bn for track improvements and £456m for signalling equipment, accounts for 38.4 per cent of the total planned expenditure of £7,626bn on all aspects of railways in the 44 countries this year.

But, in spite of the importance of the sector in value terms, it is often overlooked by those outside the railway industry.

The developing world, together with Italy, France and the Netherlands, dominate spending this year on new track, in those countries outside the U.S. and the Communist bloc.

Britain, on the other hand, does not plan to spend any money on new track, although it hopes to spend £77.1m on track improvements.

Nigeria leads the world league table in plans for laying new track in 1980, with expected expenditure totalling \$494.6m. In contrast, however, Nigeria expects to spend only \$96,000 on signalling.

Italy is second in the world league with plans to spend £167.4m on new track and almost £100m on track improvements.

France is third, with \$101.8m of investment in new track planned for this year, on top of \$215.8m planned for track improvements. This total of \$317.7m on track alone exceeds the total of \$316m British Rail expects to spend on all forms of railway investment.

The Netherlands expects to spend \$58.9m on new track and \$5.4m on improvements.

South Africa, with an established network, plans to spend over \$104m on track improvements with a much smaller amount on new track. Elsewhere, Spain, Venezuela, Brazil and Australia all have plans to spend from \$25m on new track this year.

In the signalling sector, marked differences occur between the developed western

nations and those in the third world, with the greatest spending outside the U.S. and the Communist bloc expected to take place in the leading European industrial countries, including Britain.

West Germany leads the league table for planned expenditure on signalling equipment, with the prospect of spending over \$97m this year. France is second outside the U.S. and the Communist countries, with plans to spend \$81m over the year.

Britain is third, with plans to spend \$53.1m on signalling, making it the third most important railway industry sector this year in the UK, after track improvements at \$77m and passenger coaches at \$56.3m.

Italy also has ambitious plans for investment in signalling, with over \$47m budgeted for this year. Spain aims to spend \$43m on signalling and Belgium \$38m. The emphasis on signalling in Europe underlines the higher densities of railway operations.

Active companies

Few developing nations intend to spend more than \$1m on signalling this year. Some countries, including Cameroon, El Salvador, Honduras, Malawi and Nicaragua plan to spend nothing.

Britain has more than 30 companies active in the track and permanent way fields—more than any other western country—and it has an established lead in many aspects of the technology. Many of the British manufacturers are members of the Railway Trackwork Engineers' trade association, which with the broader Railway Industry Association, promotes the activities of the component industries making up the trackwork industry.

The members include A.I. Welders of Inverness, makers of resistance rail welding and other specialised rail equipment machines; Edgar Allen Engineering of Sheffield, which specialises in making manganese steel rail switches and crossings; Henry Boot Engineering, also of Sheffield, which provides a survey, design and trackwork laying service, as well as manufacturing switches, crossings, buffer stops, signal fittings and allied products and Crank Lion Eagle of Scunthorpe, which makes switches and crossings and builds complete railway systems.

Thos. W. Ward (Railway Engineers) provides a comprehensive design and manufacturing service in rail equipment. The company was formed from a consolidation of the railway engineering activities of Thos. W. Ward, Taylor Brothers (Sandilacre) and the Railway

and General Engineering Company.

Equipment from the company includes switches, crossings, timbered trackwork layouts, narrow gauge and high speed track, fastenings, buffer stops, baseplates, sleepers, timbers, lever boxes and bolts.

The sleeper industry in Britain is dominated by Dow-Mac Concrete of Stamford and the Costain Concrete Company of London. Both companies specialise in designing and making pre-stressed concrete monobloc sleepers.

Railway lines are produced by BSC Track Products, part of the State-owned British Steel Corporation.

Two other vital sectors of the track and permanent way industry are rail fastening manufacture and machinery for installing track and rails.

Companies which make plant and equipment for installing and maintaining track include the Permanent Way Equipment Company—Permaquip—of Nottingham; Plasser, of West London, part of the Austrian group Plasser and Theurer of Vienna; Cowar and Sheldon of Carlisle; Portec (UK) of Wrexham, part of the Portec Inc. group of Illinois; D. Wickham and Company of Ware, Hertfordshire, makes a range of self-propelled railway track and overhead line inspection cars, and related equipment.

Pandrol, based in London, is one of the leading companies in the world for the supply of resilient rail fastenings. Its story is one of the greatest, but least heralded successes of Britain's railway industry, and involves a mass-produced product whose cost is in pence, rather than pounds, but which contributes to the success of railways throughout the developed and developing world.

The Pandrol rail clip—now standard equipment for British Rail—has been made in Britain, or under licence around the world, since 1959. Since then, over 224m have been made in six variations and with more than 300 different assemblies. The success earned the company the Queen's Award for Industry in 1974.

Among the technical successes of Britain's rail track engineers is the technique known as 'paved concrete track'. The PACT system was developed by British Rail Research at the Railway Technical Centre Derby, in conjunction with McGregor (Paving). A special paving train, called a slip-form paver, combines pre-mixed concrete and sections of reinforcement material into a continuous reinforced concrete slab along the route at a rate of 40 metres (130 feet) an hour.

The system is particularly

suitable for use in circumstances where maintenance of conventional track would be difficult, such as in tunnels or on viaducts. The system has already been used on the Tyne and Wear Metro.

Britain has also used its expertise in trackwork to update track for use by the current generation of 125 mph high speed diesel passenger trains now in service. In other countries, particularly Japan, the solution to the demands of high-speed trains has often been to build new track.

The 150 mph potential of the electric advanced passenger train is also expected to be realised on existing track—when the signalling has been updated.

Throughout the advanced industrial countries, the market for signalling and computer control and related equipment is expanding rapidly. Higher speeds on main line track and more intensive operations on urban rail networks have played their part in this expansion.

The search for higher productivity is also a factor, and work is now under way, in Britain and elsewhere, on more automated systems, radio techniques and remote control, particularly of freight trains.

Dominated

In Britain, 10 companies compete for world markets, with Plessey, M.L. Engineering and Westinghouse (now part of Hawker Siddeley) among the competitors for the British GEC subsidiaries.

The U.S. home market is supplied by more than 20 manufacturers including Bendix and General Electric. The market is dominated in Sweden by Ericsson, and Japan has Nippon Signal and Fujitsu.

The industry in West Germany has some of the biggest names in the business, with Siemens and AEG Telefunken providing equipment for rail networks across the world.

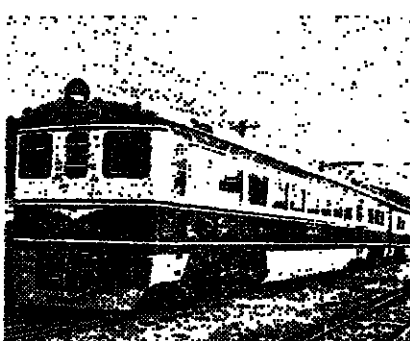
France also has a powerful sector, including CSEE, which makes remote control equipment, cab signalling and automatic train stops; Sazby, which devises centralised traffic control and other automated systems and Alstom-Atlan-tique.

The rapid growth in the market for metro, urban and other mass transit rail systems has opened up the possibility of automatic revenue collection equipment becoming a major sector in its own right.

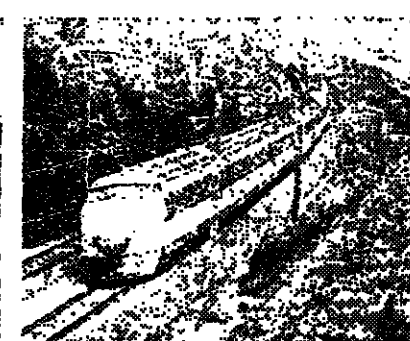
London Transport has plans for a \$55m system to cover the entire London underground system with automatic fare collection equipment.

L.McL.

Hitachi rolling stock rolls around the world



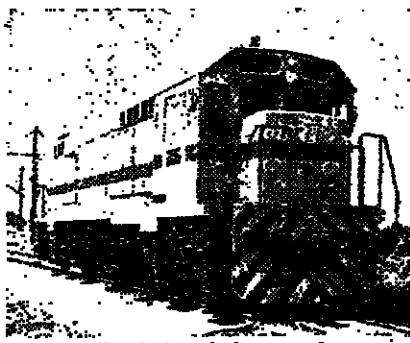
In Chile, electric multiple-unit suburban trains are helping to ease transportation problems.



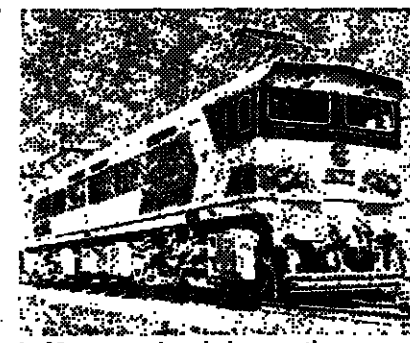
In Japan, the Shinkansen 'Bullet Express,' a 210 km/h electric train, has set international records for speed and safety.



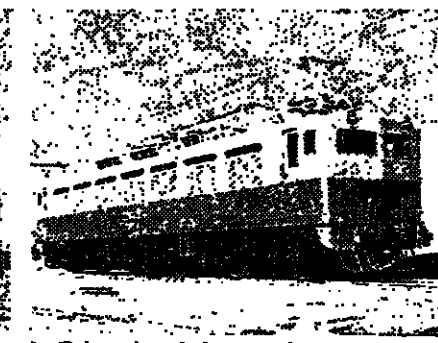
In Sri Lanka, tourists are riding in comfort on Hitachi's air-conditioned diesel multiple-unit trains.



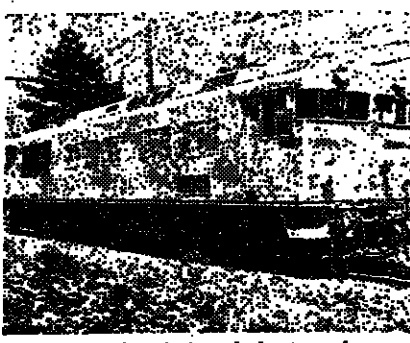
In Iran, diesel electric locomotives (Bo-Bo, 1050 PS) are being used for shunting and branch line service.



In Morocco, electric locomotives (Co-Co, 3000 kW) are being used to haul phosphate.



In Zaire, electric locomotives (Bo-Bo-Bo, 2400 kW) are helping with industrialization plans.



In Bolivia, diesel electric locomotives (Bo-Bo-Bo, 3020 HP) are providing outstanding service in rugged terrain.



In Nigeria, first class passenger cars supplied by Hitachi are making life more fun to see the country by train.



In Brazil, Hitachi's all stainless steel electric cars are making life easier for commuters on the inter-urban run.

Main Products

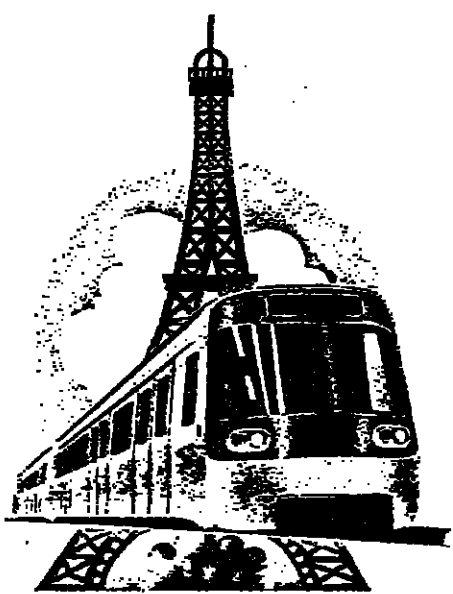
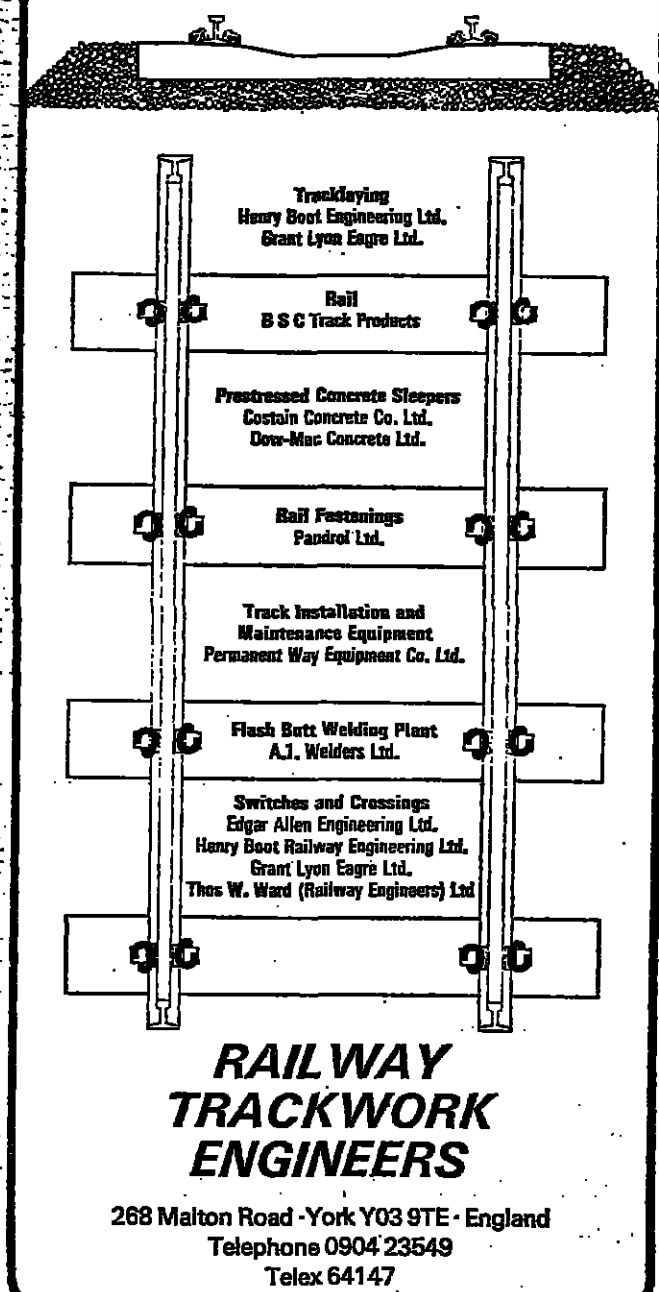
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WORLD RAILWAYS IV

More countries opt for electrification

ELECTRIFICATION OF rail systems around the world took a number of positive steps forward last year.

A rising number of countries became committed, to a greater or lesser extent, to rail electrification in the interests of potential improvements in operating economics and reduced maintenance costs.

According to a recent poll by Railway Gazette International, 13 per cent of the world's railways are now electrified.

Even in those countries, like Britain and Canada, still not committed to a major programme of electrification of national rail networks, debates are nevertheless under way.

In Britain, the debate has its origins in the recommendations of the House of Commons Select Committee on Nationalised Industries, in May 1977. The Government and British Rail accepted the spirit of the recommendations and undertook a joint review of the potential for electrification.

The interim report of the "Review of main line electrification" was published in September. But the final report, which will include the vital cost-benefit studies of a range of options for further electrification in Britain, is not expected to be published until the spring.

Britain already has 3,700 route-kilometres electrified. The interim review describes a range of options for further electrification, including an ambitious 20-year programme to electrify up to an extra 4,800 route-kilometres.

The other options range from an extra 600 route-kilometres to 2,800 route-kilometres considered suitable for electrification.

New criteria

However, these remain options and whichever one, if any, is chosen, will almost certainly have to meet new Government criteria for Inter-City route investment. These are the new financial targets set by Government and agreed with British Rail and they call for all investments to show a return of 20 per cent on capital employed.

But in sharp contrast to Britain's still-undecided position on further main line electrification, France, through the Société Nationale des Chemins de fer Français (SNCF) has set itself spectacular targets.

By the end of the century,

SNCF intends to haul 85 per cent of all long-distance inter-city passengers, all Paris commuters and 88 per cent of all freight on fully electrified rail routes.

The Middle East war of 1973 appears to have marked a turning point for electrification in France. In 1970 uncertainties about the economic viability of greater electrification kept the French railways' plans for further electric traction almost at a standstill—no expansion beyond the then 9,350 route-kilometres was envisaged.

But since 1973, SNCF has decided to add a further 4,000 route-kilometres to the list of electrified lines over the next 10 years.

The importance of oil to the operating economies of railways varies from country to country. In the case of British Rail, the proportion of working expenses accounted for by fuel costs rose from 4 per cent before the 1973 oil crisis to 7 per cent in 1977, after the first rounds of steep oil price increases.

But the Government, in its evaluation of proposals for more electrification, will be aware that British Rail's use of fuel oil — at 800,000 tonnes a year — is small compared with national consumption of 24m tonnes annually. Direct oil savings from electrification are therefore likely to be small.

Nevertheless, transport in all its forms accounts for just less than a quarter of total energy consumption and the continued rise in the price of crude oil may well have sharpened the minds of railway planners and Governments to consider a fresh appraisal of the merits or demerits of electrification.

Governments which joined the ranks of those considering or favouring electrification last year include those of Colombia, Pakistan, India and South Africa, according to Jane's World Railways.

The directory says that Pakistan's doubts in the mid-1960s about the viability of the conversion project between Khanewal and Lahore have now been replaced by a new enthusiasm to electrify the whole line from Karachi to Rawalpindi.

India, which still operates more than 8,000 steam locomotives, offers the electrification equipment manufacturers of the world enormous opportunities for sales.

Last year Indian Railways was expecting to spend the equivalent of \$U.S.30m on elec-

trification. This compares with the \$U.S.36.2m budgeted for electrification by the Brazilian Federal Railways (RFFS) last year.

Italian State Railways (FS) planned to spend U.S.\$47m and South African Railways (SAR) announced projects for converting existing lines to electric power worth U.S.\$42m last year.

In the case of British Rail, its most ambitious scheme—to electrify an extra 4,800 route-km—would extend electrification to secondary routes. But, according to Mr. Paul Goldack, editor of "World Railways", "conversion on this scale will require new technology to justify the expense." This is the development of a sulphur battery, he said.

Such a solution is many years away, but eventually it could avoid the need for expensive overhead electric power lines, a feature which may prove to be attractive to developing countries where finance is often not

available for widespread overhead schemes.

Britain's Railway Industry Association, which represents UK manufacturers of all types of railway equipment, is optimistic about future technical developments in overhead electrification, which may help to reduce capital and maintenance costs.

Progressive

The association said in its document on the case for electrification that, taking the electric system as a whole, progressive development has reduced the initial and operating costs. The capital cost of overhead line equipment has been cut by 30 per cent in real terms over the past 10 years.

At the same time, less maintenance is now required for overhead lines and the speed capability has been increased.

Britain's 150-mph electric advanced passenger train is expected to enter service in

May — powered by overhead lines from London — carrying passengers at 125 miles an hour until the signalling system can be upgraded for the higher operating speeds.

Britain, although not committed to a major national programme of electrification, is expected to spend \$11.3m on new electrification schemes mainly for suburban services — this year, putting British Rail into tenth place in the world league — for non-U.S., non-Communist countries—for electrification programmes.

In comparison, France leads the field, with plans to spend \$52.1m this year. Belgium is second with plans to spend \$32m and Spain, third, plans to spend \$43m.

The Soviet Union has already pressed ahead with major schemes, but Canada, which also has vast distances and a constantly busy freight and passenger network, does not plan to spend anything on elec-

trification this year or perhaps for the foreseeable future. Diesel electric locomotives will continue to be the main power source on Canadian railways until the expense of electrification can be justified. However, the opportunities for manufacturers elsewhere are potentially enormous. The Railway Industry Association's industrial members have identified more than 70 major opportunities for companies in the field of electrification equipment and design.

The total value of 40 of these rail electrification schemes is estimated by the association to be worth at least \$1.7bn to the British industry.

The association says that the home railway, with a firm commitment to a programme of railway electrification, can provide a base load for industrial production, a proving ground for technological development and a shop window for potential world customers.

L.McL.

India speeds long-distance passenger services



The Taj Express, one of India's 8,000 steam trains, thunders out of Delhi en route for Agra. This service is popular with tourists making a day trip to visit the Taj Mahal at Agra.

INDIA'S RAILWAY system, which was begun 127 years ago, is now Asia's largest—and the world's second largest—rail network under a single management.

Since the time of colonial rule in India—the first train steamed out of Bombay on April 16, 1853, to the salute of 21 guns—the rail system has been expanded from a single track of only 33 km to a vast network of more than 62,000 route km. Today, Indian Railways has become the main "artery" of the sub-continent's transport system, with 11,000 trains carrying 67 per cent of all freight and 40 per cent of passenger traffic. This amounts to more than 9.5m passengers and 650,000 tonnes of freight every day.

India's rail Minister—just appointed by Mrs. Indira Gandhi, the Prime Minister—is Mr. Kamala Pathi Tripathi, a former chief minister of Uttar Pradesh. He has held the posts of rail and shipping Minister under previous administrations.

One of his important tasks will be to encourage further development of long-distance "inter-city" passenger services. Since India's passenger trains crossed the 100 km/hour barrier, in recent years (and speeds of 140 to 160 km/hour are now envisaged), many inter-city journey times are being considerably reduced, for example Delhi to Madras, which once took 48 hours, now lasts half that time. The Bombay/Delhi service, once a 24-hour trip, has been cut to 17 hours.

Achievement

By any standard, India's State-owned rail network has grown into a vast undertaking, representing a total investment of Rs 59,000m (£3,300m), yielding an annual revenue of about Rs 21,000m (£1,166m).

Although Indian Railways consistently remains in profit (Rs. 1,262m, that is £70m in 1977-78), the network's long-standing achievement has been to provide relatively cheap transport for an economy which has grown steadily under the guidance of successive five-year plans.

The railways have long been India's biggest employer. Each one of the 1.5m people employed is, technically, a Government civil servant—which gives India the world's largest, the civil service. Many more people are indirectly employed by the railways—it is said that one in every 20 people in India is earning his livelihood directly or indirectly from the system.

India's multiple-gauge railway links a network of 7,000 stations. Nearly 30,000 km of track are broad gauge (that is 5 ft 6 in); 25,000 km are metre

gauge; and 4,500 km are narrow gauge (2 ft 6 in and 2 ft). So far, 4,720 km of the routes have been electrified.

The railways operate nearly 11,000 locomotives (8,000 steam, 2,000 diesel and 600 electric), plus a fleet of 27,000 passenger cars, 2,400 electric multiple units, 70 rail cars and 8,000 other coaching vehicles for passenger business.

The railways hold nearly 400,000 freight cars. A large part of the railway's freight consists of bulk commodities such as iron and steel, ores, foodgrains, cement, fertilisers and petroleum products. Moreover, the shift from general goods to bulk traffic, as disclosed by the traffic trend in recent years, is not likely to be reversed.

The growth of traffic on Indian Railways in the last 20 years has been steady with the freight tonne/kilometres carried increasing nearly three-fold during the same period. The railways purchase equipment and materials costing about Rs 7,300m every year.

The beginning of India's railway system dates back to the late 1840s. Lord Dalhousie, the first Governor-General of India (he was the youngest man ever appointed to the post), recommended a rail system of trunk lines connecting the hinterland of the Bombay, Bengal and Madras Presidencies.

It was a time of railway mania for investors, and the government entrusted the construction

to private companies which were

guaranteed a return of 5 per cent on their capital investment for a period of 25 years and free land needed for construction. First came the Great Indian Peninsula Railway from Bombay in 1854, and the East Indian Railway from Calcutta. Other lines soon followed, although construction costs were enormous.

By 1869, the guaranteed profit system had fallen into disfavour and for some years most lines were government-built, while the policy of buying up existing companies continued until 1947.

Inspection

However, as early as 1825 the British rulers were taking important steps to Indianise the railways administrative set-up.

By the time of Independence in 1947, Britain "fortunately hadn't left a vacuum behind, as far as the railways were concerned," comments Mr. M. K. Kapur, who is the Railway Adviser to the Indian High Commission in London. His department, assisted by offices in Paris and Bonn, carries out inspection of materials purchased in Europe for Indian Railways.

Construction of wagons for Indian Railways is undertaken at 16 privately owned and public sector concerns, producing 5,000 wagons a year. The Diesel Locomotive Works at Varanasi produces 120 locomotives a year, while the Chittaranjan Works manufactures about 60 electric locomotives and 30 diesel-

hydraulic shunters annually.

The increasing workload of Indian Railways is bringing with it the need for modernisation of signalling and telecommunication equipment, plus greater mechanisation of major marshalling yards.

Nevertheless, India's expertise in rail systems is also winning contracts and export orders from developing countries. Nigerian Railways, for example, are to be managed and run by India's public sector Rail India Technical and Economic Services (RITES) which has won a Rs 200m contract. RITES has interests in other projects for Zaire, Ghana and Iraq. India is also exporting railway equipment worth Rs 500m to Vietnam.

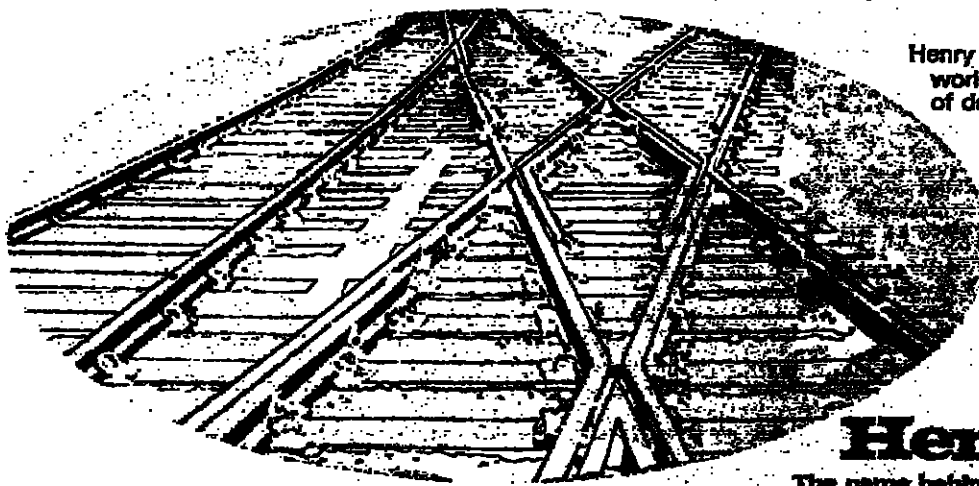
For the visitor to India, the railways offer unforgettable opportunities to explore the complexities and often fascinating contradictions of the sub-continent. The railways have three classes of passenger travel—air-conditioned, first and second.

Air-conditioned coaches, among the most comfortable of their kind in the world, are becoming increasingly popular. A 45-day all-India tour by rail will take you to most of the places you would visit on a 30-day air trip, but costs a good deal less.

For overseas visitors, an "Indian" pass is available, if paid in foreign currency, enabling the tourist to travel wherever or whenever he likes, for periods of seven to 90 days.

Michael Wiltshire

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مكتبة المجلد

WORLD RAILWAYS V

Correspondents describe three new rapid transit systems which are changing city life

Success in Washington

WHEN President Carter signed a Bill early this month authorising \$1.7bn in federal funds to complete Washington DC's 101-mile underground system, he was not necessarily signalling a turnaround in his previous objection to large-scale rail projects.

It would have been "cynical" he said, to interrupt construction because of lack of funds with the system now one-third completed and with another third being built.

While on one hand he has pushed mass transport as an energy saving measure, the cost-conscious President has in the past eyed with distaste "grossly over-designed" systems and has even spoken of subway tunnels as an "anathema". There was no denying the President or any other official that the capital's modernistic, smooth-running system has been a success so far.

The average of 255,000 passengers that the Washington area Metro is now carrying each week has exceeded all expectations of the planners. In 1979 the system completed an estimated 154m trips, a 15 per cent increase over the previous year. The planners had expected a 9 per cent increase in each year until 1985.

Since the first 4.2 miles of track opened in 1976—and 51,000 passengers took free rides—the area's residents have responded enthusiastically to the opening of each additional section. In an area where commuting by car has been the norm for decades, the trend is now towards bus and rail travel to work.

The new Metro system has also developed into a tourist attraction. Visitors to the city stop to ride the 204-ft long escalator running through a huge granite bowl at the Dupont Circle station, admire the spacious vault-like stations and, for pure entertainment, ride the smooth, quiet, well-designed cars which now run from northern Virginia through the capital and into southern Maryland.

The Metro has had a significant impact on private investment in once-shoddy downtown Washington. With the opening of each section business has picked up rapidly in department stores, shops and restaurants near stations. The federal city council, an organisation of top business and civic leaders, reported last year that more than \$970m-worth of

private development has been completed or placed under construction near existing or proposed stations, and nearly \$5bn more is contemplated.

The council predicted that Metro-related development would bring the district of Columbia \$60m in new local revenue by 1985.

Washington's Metro struggled into birth. Local politicians started talking about the need for an underground system 50 years before work began. The eight local jurisdictions through which it runs have bickered for the past 15 years about funding and routes.

The transport authority, which oversees both buses and trains, has taken criticism for cost escalation. Inflation, planning delays by participating governments, strikes and storm damage ran costs from the original estimate of \$2.5bn to \$7bn.

Crime-free
But the underground has emerged from the political chaos, almost miraculously, as an efficient, well-built, remarkably crime-free system.

Officials attribute the system's security and safety to its sophisticated communications network, which includes TV surveillance, telephone hotlines, two-way radio communication between trains and control centres, a private telephone network, public address systems in trains and stations, trackside emergency telephones and intrusion and fire alarms.

Only about half of the underground's operating costs are recovered through the fare box. The rest must be subsidised by the localities. With 33 miles of Metro in operation and 27 under construction, the President's approval of new federal money has provided funding for the completion of the remaining 41 miles.

However, the legislation orders Maryland, Virginia and the District of Columbia to find "stable and reliable" sources of funding to guarantee local capital and operating expenses.

What will follow is more local squabbling as the states and counties search out the least painful means of raising revenue to meet the "stable and reliable" guarantee. But the Metro's popularity so far almost certainly ensures that in the end, the means will be found.

Nancy Dunn

Integration in Glasgow

SOMETIME IN the near future Glasgow will join the select group of British cities to have a fully integrated public transport system. Liverpool and Manchester beat Glasgow to the finishing post, but despite the problems surrounding the introduction of the Scottish network it will emerge comfortably ahead of that which will serve Tyneside from its Newcastle centre.

Glasgow should have been in operation last November when the Queen inaugurated the underground-rail link. Unfortunately, work on the underground was delayed and commissioning of the signalling system has taken longer than expected.

The thinking behind the Trans-Clyde railways was dominated by a need to link both sides of the Clyde—the river bisects the city horizontally—and to integrate bus and train services, bring in new rolling stock and rebuild the underground, on which hardly any money had been spent since the last century.

Moved out

A further factor which dictated planning was the changed character of greater Glasgow over the past 20 to 25 years. About a third of Glasgow's one-time population of just over a million people have moved out of the central area in this period, but the number coming in to the centre each day is as large as it ever was.

In other words, while Clyde-side, the Gorbals, Govan and Shettleston have all lost population, places such as East Kilbride, Milngavie and Cumbernauld have gained appreciably. The centre is just as busy but people are living further out.

The area's roads were improved a decade or more ago but its railways were old, had been starved of money and in many cases shut. In addition, until recently its buses had been equally old and out of date.

In place of all these time-worn services new buses, new underground trains, a linked service and a fare system that integrates the various parts of the

whole area have been introduced.

The new underground has cost £43m, involving a virtual rebuilding of the Victorian system. Stations have been updated, some new ones introduced, signalling improved and new carriages introduced. At two places interchange stations with the British Rail network were built.

British Rail, acting for Greater Glasgow Passenger Transport Executive, extended one of its lines to provide a through north-south service. Together with the various improvements carried out to stations and the new carriages the total railway cost came to £35m. With some other smaller items the whole Trans-Clyde system cost £80m.

But the railway-underground side would not have been feasible without linking the buses. Glasgow still has some way to go before it can be said to have completed this side of the operation, though railheads have been established in some places, such as Hamilton, and a zonal fare system has been evolved which will allow passengers to buy tickets valid for either their own specific zone or for cross-city travel.

New buses have also been brought in to update what was almost an antiquated system. Car-parking space has also been enlarged at a number of stations so that commuters can be encouraged to complete their journeys by public transport, a fairly standard procedure now in British cities.

Any integrated public transport system would have little impact, though, if it ignored those commuters who nevertheless try to drive into the city centre. Glasgow has acted by limiting the number of parking spaces to 14,000.

This might appear to be a fairly draconian limit for a city of 750,000 people but it still leaves ample space for the short-term parker because the city has the lowest number of cars per head of population of any of Britain's major cities and two-thirds of its commuters in any case use public transport.

With a new underground line available, a road system and a modern fleet of buses Glasgow is in a rather enviable position.

Anthony Moreton

MAJOR RAILWAY INVESTMENT IN 1980

(Figures in £ Sterling '000)*

Country	Locomotives	Passenger coaches	Freight wagons	New track	Track improvements	Signalling	Electrification	Total expenditure
Argentina	22,017	7,382	9,887	865	67,204	11,847	17,378	208,427
Angola	7,382	7,410	20,955		3,700			45,021
Australia	8,713	33,434	7,556	24,443	31,113	7,838	8,081	217,238
Austria	21,455	68,582	3,022		48,157	7,943	9,853	221,615
Bangladesh	5,051	11,680	44,151	304	7,514	913		72,255
Belgium		14,242	6,468		93,452	38,726	52,048	389,500
Brazil	10,185		11,759	28,148	14,120	1,065	9,259	149,861
Britain	8,500	56,300	22,800		77,100	53,100	11,300	316,000
Cameroon								
Canada				58	5,577	31		8,127
Colombia								
Ecuador	1,387	854	352					5,594
El Salvador			1,049					3,344
Finland	860	6,340	4,989	1,083	10,565	4,914	10,713	17,148
France	46,136	160,682	25,568	101,800	215,900	60,909	52,159	740,455
German Fedl. Republic	49,428	48,501	48,543	22,488	261,904	97,222	23,016	1,219,294
Hong Kong				12	740	3,778	26,388	472
India	†	†	†	24,000	91,428	11,428	16,000	49,120
Indonesia	509	7,583	3,371		25,524	3,150		370,571
Israel				5,556				48,487
Italy				167,482	98,765	47,820	14,290	5,556
Ivory Coast	7,385	20,491	7,284		5,762	1,275		475,949
Japan		15,724			13,358	715	2,912	53,282
Luxembourg								43,531
Malaysia	7,299		3,925	9,976	4,929	276	665	28,457
Malawi	1,572	2,302	1,639		2,021			8,367
Malaya				1,798				4,000
Mexico	833	1,094	2,898	3,125	5,227	769		18,212
Netherlands	26,169	5,757	89,315	885	18,491	2,783		190,065
New Zealand	11,348	40,898	2,128	56,974	5,437	22,458	946	177,541
Nicaragua	10,426	1,455	6,561	2,880	399			31,173
Nigeria		689		466				1,455
South Africa		4,219	494,633	13,332	96	1,536		534,081
Spain	62,002	26,857	60,570	48,150	104,184	12,594	14,453	786,313
Sudan	9,752	43,930	36,942	36,161	43,048	43,048	43,048	354,804
Sweden	3,600		259		1,370			23,130
Switzerland	14,405	14,493	15,969		12,685	5,804	5,011	100,220
Thailand	31,283	13,580	9,728	18,147	5,360	2,094	801	227,519
Tunisia	548	946	737	3,697	519	258		8,456
Turkey	3,529	15,765	11,882	8,706	8,235	4,394		62,782
Uruguay	21,161	15,988	40,440	15,894	28,680	6,028	10,505	264,150
Venezuela		1,030		2,402	7,825	323		13,661
Total	466	976	34,978	5,640	542			45,694
	393,349	637,669	505,143	1,126,516	1,343,927	456,834	333,883	7,626,892

* Figures, calculated in £ Sterling, are approximate only based on exchange rates prevailing November, 1979. Totals include expenditure not necessarily listed under main headings. Table excludes U.S., where investment is expected to top \$2,511m in 1980.

† Total Indian spending on motive power and rolling stock is expected to reach \$164.571m.

Source: International Railway Journal.

Revenue set to exceed forecast in Hong Kong

HONG KONG'S newly-opened Mass Transit Railway (MTR) is proving a wonder. It seems on the point of proving that railways can still be good business. Even more remarkable, it is likely to show that underground railways can be justified on financial grounds alone and do not have to look for social benefits to justify real or implicit subsidies.

Actually, Hong Kong has yet to show that it can run a railway efficiently. The first section only started operation on October 1 last, and the whole of the 15.6 km first stage, known as the Modified Initial System (MIS), will be opened next month by Princess Alexandra.

The management achievement so far is to have built the MIS ahead of schedule and below the originally (1975) estimated contract cost of HK\$4.8bn (the actual cost of the MIS is about HK\$6.6bn, including cost of land acquisition, MTR Corporation overheads and HK\$1bn in pre-operational capitalised interest).

Within budget does not necessarily mean cheap. The MTR is by far the world's most expensive railway, with construction costs alone around US\$120m a mile. One major reason is the very difficult and varied soil conditions which include reclaimed land and decomposed granite requiring much tunnelling to be done in pressurised chambers. Another is that a tunnel had to be laid on the sea-bed across Hong Kong harbour. Thirdly, construction has had to be done without totally disrupting life in the densely populated city. Fourthly, the volume of passengers expected has involved the construction of huge station concourses. It is only the expected throughput and Hong Kong's very high population density which should make it a viable economic proposition.

In the first three months of partial operation it carried 40 per cent more passengers than estimated. By the mid-1980s, when the 10.5 km Tsuen Wan extension is operating, the MTR is expected to carry 1.8m passengers a day.

High usage

As most of the area through which it passes is a mix of residential, commercial and industrial properties, the MTR can expect a high usage rate throughout the day and early evening. It is not a commuter service liable to suffer serious underutilisation of equipment for much of the time.

Fares—at HK\$1 to HK\$3—are not particularly cheap by local public transport standards. But there seems little doubt about the public's preparedness to pay for speed and convenience.

Under original projections, the MIS will pay for itself in 12 years. Though higher interest rates on floating rate loans and the decline in the HK dollar may push eventual costs above estimates, there seems little

doubt that revenues will be even further ahead of budget.

The incremental return on the Tsuen Wan extension is greater, with an expected 10-year pay-back period. This results from the additional traffic it will bring to the whole system; and the higher proportion of less costly overhead and cut-and-cover construction—the MIS mostly bored tunnel.

In some ways Hong Kong has been lucky with the timing of the construction. The project hit a major setback early in 1975 when inflation fears caused a Mitsubishi consortium to withdraw from a letter of intent to build the railway for a fixed price. The project was broken up into numerous separate contracts and MTR had to accept escalation clauses. However, competition for the work kept tender prices down and Exim-banked loans generous. The first three years of construction saw a very low rate of inflation in Hong Kong.

Largest share

It was partly because of low inflation that the MTR was able to let most of the contracts for the extension at fixed prices. Since then the rate of inflation in Hong Kong has risen to double figures.

Japanese companies such as Aoki, Kumagai Gumi and Nishimatsu won the largest share of the MIS civil engineering contracts, though consortia led by Dragages de France and Kier of the UK won a major contract. The Europeans did not wholly distinguish themselves in practice, however.

Relations with the MTR were not always smooth. The Japanese won almost all the civil contracts for the Tsuen Wan extension, though Dragages secured one of them. But British and other non-Japanese groups did well with mechanical and electrical contracts. Metro-Cammell won the contracts for all the rail cars. Other winners included GEC, Hitachi and Siemens for electrical equipment; the UK subsidiary of Westinghouse Brake for signalling equipment; Henry Boot of the UK for track laying; Otis of the US for station escalators. British consultants such as engineering firms Freeman Fox and Bankers Kleinwort Benson on the financial side, also played significant roles.

British success in winning electrical and mechanical contracts has been partly attributed to favourable financing terms. The MTR, headed by its tough managing director Norman Thompson, talked Britain's Export Credit Guarantee Department into a scheme providing a fixed price contract in Hong Kong dollars and a loan structured to avoid the MTR being exposed to fluctuations in the UK dollar-stirling rate.

Mr. Thompson then used this precedent to persuade the Japanese and Germans to provide export credits in either Hong Kong or U.S. dollars rather than in Deutsche Marks or Japanese yen. (Earlier yen

credits were repaid by the MTR at a big loss.)

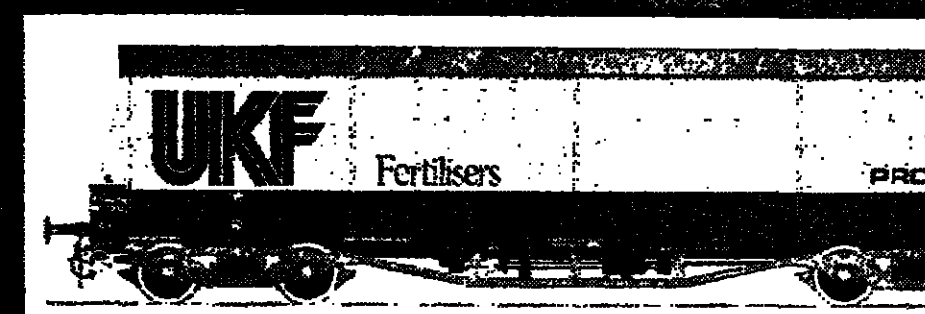
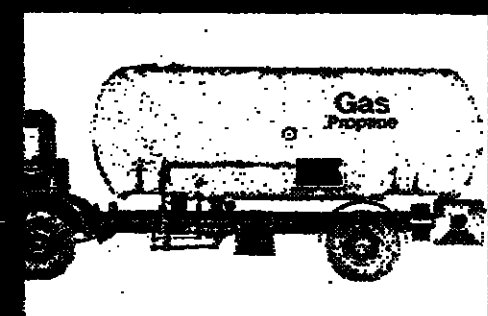
Overall, export credits will cover about HK\$3.8bn out of total contract costs, excluding capitalised interest for the MIS and the Tsuen Wan extension of about HK\$8.4bn.

Philip Bowring

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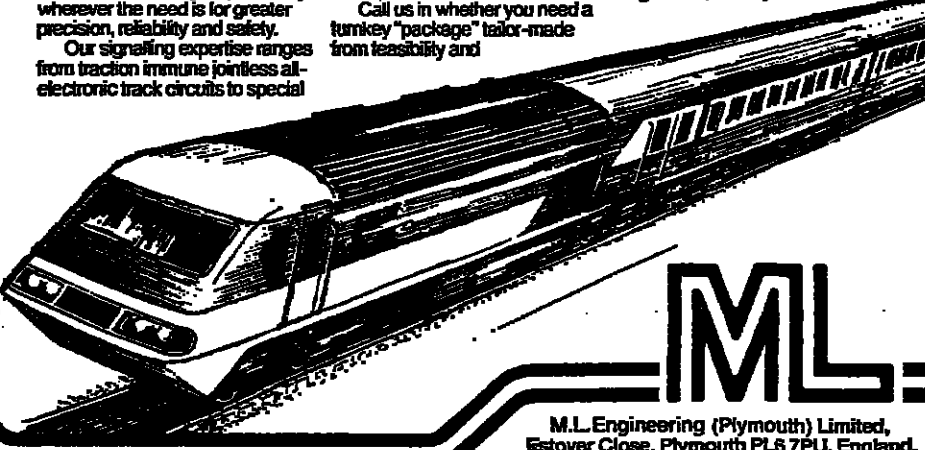
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THE ARTS

Television

The serial's the thing

by CHRIS DUNKLEY

Recent plays by David Hare and John Osborne have heftily reinforced the belief about television drama built up in this column during the last seven years: that the single play (so vociferously championed by an Eng. Lit. faction which has no instinctive feel for television and even less respect for it) is an over-valued form producing far more dross than gold, and is nothing like as well suited to the medium as are series and serials.

It must promptly be admitted that some of television's most original works have appeared in the form of single plays—but they have been few and far between: *Blue Remembered Hills* comes to mind and some of the strand of social realism exemplified by *Caligula* and *Home*. Even here, though, the best work of recent years has been in series: for instance *Lan and Oler* (which, I am delighted to learn, is to be repeated on Sundays on BBC2 starting on March 9).

Furthermore, I exclude from the definition of the true single play most drama-documentaries or "faction," though it is ultimately impossible to draw a line marking exactly where documentary ends and drama starts. Many viewers would refer loosely to André Malraux's superbly entertaining BBC biography on Friday, *Songs of a Soudanese*, as a "play" mainly, because the most gripping sequence happened to be the opening one with Fulton Mackay in the role of Robert Service, dressed in pyjamas, delivering "Dan McGrew" to an enthralled audience in a Klondike saloon. Yet with its adroit use of archive films, its clip from an interview with the real Service, and its concern with historical facts, the programme would fit perfectly well into the definition of documentary—the "creative inter-

pretation of reality"—given by John Grierson who coined the word in the first place.

Skirting round the morass of other definitions, I repeat that the single play is over-valued and suggest that Osborne's *You're Not Watching Me* and Hare's *Mummy* bears this out. Further, I believe that if Osborne's play—or what seemed, rather, like notes towards a scene from a play—had been submitted to television not by him, with the cachet of a supposedly "serious" playwright, but by Joe Blogs it would rightly have been rejected out of hand as unoriginal and, in its single-file procession of characters each delivering a self-contained set piece, structurally inept.

Yet this scrap of nonsense received far more attention than the four episodes shown so far of John Finch's engrossing BBC1 serial *Flesh and Blood* put together; an illustration of the unhealthy symbiosis existing between those who create single plays and those who promote and otherwise write about them, most of whom to form a single university group studying Beowulf and Marlowe together.

Hare's single play, *Dreams of Leaving* on BBC1, was in contrast to Osborne's, technically accomplished. Kate Neilligan's acting was, once again, beautiful (a carefully chosen word) and Hare's own direction almost as impressive and adventurous (as in his television play *Licking Hitler* two years ago). But what did it all mean? Ninety per cent of the new play described yet again the relationship between television's two trendiest stereotypes of the late seventies: the wishy washy heavily dependent sexually clumsy incompetent scruffy male and the witty polymathic elegant sexually sophisticated independent female. (The man, predictably, was a newspaper

reporter. My theory concerning the Fleet Street paranoia which Osborne and Hare share with Stoppard is that all three men are... journalists or critics manque and rather ashamed of making a living from the theatre's tinsel world of make-believe...)

Hare's play ended with one of those speed-up sequences which have become his trade mark, and this time he seemed to be trying to have things both ways by sending his heroine to a mental hospital. It was a glossy yet sombre work which I suspect had rather less to say than was implied, yet it is hard to be sure because it stopped just where a good television serial would be starting.

Since that production a fortnight ago there have been other single plays of course: BBC1's *Play of the Month* has ill advisedly changed its name to *Festival* and opened a new season with a strikingly pretty version of *The Misanthrope*, updated to the Paris of the twenties and with Ian Holm cast, perhaps not entirely happily, as Alceste opposite the ungloriously attractive Cheri Lough as Célimène. Molière's play is a classic, it is true, and the modernisation was clever. Yet television is rarely at its best when doing the worthy job of conveying classic plays to the millions.

Which is not to say, however, that single plays written specially for television are necessarily better. Molière managed 300 years ago to say in his play 10 times more about the hypocrisy and sycophancy of fashionable society than Osborne managed in his squib. And John Challen's *Lifeline* on BBC2 was not only written expressly for television but was actually all about making a television play, too; yet its content was very slight.

Gentle Folk in the same slot

the previous week was a lot more meaty. Having rapidly created a powerful Edwardian atmosphere, writer Alexander Baron and director Rodney Bennett played their characters against one another with the skill of true dramatists, and the Baron's main theme of the young man suffering from premonitions of later 20th century barbarities was as eerie as some of the Priestley time plays.

The main point to be made, however, is that these single plays seem like sketchy and fleeting film trailers when compared to BBC2's five part serialisation of *Pride and Prejudice* which has been directed by Cyril Coke, adapted by Fay Wheldon, and produced astonishingly well by Jonathan Powell. Astonishingly because his last two works were *Testament of Youth* and *Tinker Tailor Soldier Spy*, two of the best television serials in years and to follow up with a third of similarly magnificent quality really is rather astounding.

It may be objected that *Pride and Prejudice* is, surely, an example of classic culture not so very different from *The Misanthrope*, even though written 150 years later and about another society in a different country, and that by my own reasoning television could not be at its best in conveying it to the viewing millions.

But my point is that the very facts of serialisation—length, scope, continual returns to the same characters and locations and sets, the audience's steady accumulation of background and understanding until the viewer himself starts to contribute to that cumulative process—all make for a huge qualitative difference between single plays and serials. Not to switch on Part 4 next Sunday (or Part 3 at 5.55 tonight if you are watching the midweek repeats) would be as unthinkable as not reading the next chapter of a novel.

It may be partly a matter of finance: perhaps it is only with a serial or series that it is economic to dress sets with the sort of scrupulous detail that Barbara Gosnold seems to have achieved on *Pride and Prejudice* so that one can believe unthinkingly in the surroundings. Certainly it cannot be cheap to include a perfect little cameo scene such as that of Jane writing a letter by candlelight in Episode 3—like a fine Dutch interior. Yet generally it cannot be put down simply to money.

What it can be put down to will have to form the subject of next week's column since this one suffers from the very fault it identifies: devoting too much attention to single plays and too little to series and serials. Not only is there more to say about *Pride and Prejudice*, but the phenomenon called John Finch demands more attention: his 10-part *Flesh and Blood* on BBC1 has been joined this week by *The Spoils of War* on ITV which promises to be even more extensive—perhaps a challenge to his own 52-part *Family At War*.

No less care had been expended on the *Mass* (sung by a very large London Symphony Chorus, extremely well, in the Robbins-London edition), and there the result was imposing indeed. What often seems the less interesting sections of the work (relatively speaking: there is really nothing weak in it) were powerfully shaped and telling, without manufactured drama—in stern music, Abbado is splendid, and the *Qui tollis* was colossal.

Unfortunately his epic sobriety infected his soprano soloists too. Margaret Price, in luminous voice despite a hint of breathiness, untypical of her best form, sounded lovely in the *Christe eleison*, but she took the operatically ravishing *Et incarnatus* as if it belonged to Bach cantata: beautiful to hear, but all pious restraint, with the florid passages slowly and solemnly delivered.

The *Laudamus* to went to Fredericka von Stade—frail, charming and very cautious; since she and Miss Price were decisively ill-matched in the ecstatic *Domine Deus* duet, there was no thrill in their entwined soaring. A human dimension of the *Mass* was lost, then; but its monumental side was grandly displayed, and there were great rewards in that.

Round House

Richard III

by MICHAEL COVENEY

The Kremlin must be shaking in its collective boots at the news that *Vogue's* part-time critic has boycotted the visit to London of the Rustaveli Theatre of Georgia, whose outstandingly talented company has just beaten the cultural freeze and provides, in the performance of Ramaz Chkhikvadze, the genuine article, great acting. At first, it seemed as if Robert Maxwell, who has put up the money, had decided to tell us about the winter of his discontent. But he was there merely to draw attention to the fact that no one was protesting. A few counter-demonstrators outside were cheering the Russian invasion, looking slightly silly with nothing to counter-demonstrate against. Inside, the house gave the company a standing ovation.

Chkhikvadze joins the elite of Olivier, Ian Holm and Robert Hirsch in the central role. But it is an interpretation fully integrated into a view of the play that is not so much Machiavellian as fatalistic. Queen Margaret, resembling the Queen of the Night, ushers the characters to their grisly fates from a leather-bound tome. Chkhikvadze does not so much determine his campaign of greed and murder as deferentially succumb to it.

He first appears rolling down-

stage in a walk miraculously executed by legs that are permanently crossed. Like the supremely effective music, he asserts himself by a patient process of insinuation. The wooing of the widow Queen is both ethereal and exhausting. Every suggestion is given rock solid facial expression and then fixed by a commanding stare, at which point his pupils vacate their sockets and disappear into his skull. There are repeated quotations from Bach's C Minor Prelude, Gounod's "Ave Maria" and the Mozart Requiem, along with a jaunty ragtime motif that deflates any hint of ambition even as it is dropped.

Golden toy crowns are proffered and doffed to the manic accompaniment of rock and roll. The sideshow feel of the thing is stunningly reinforced in the last section when the doomed Richard is dogged by a wise old clown, played by an actor, Avto Makharadze, who has two mouths for the price of one and has also played a comically slobbering Edward IV in a walking frame and an invented Archbishop. Richmond is there from the beginning, finally tackling his adversary in slow motion through a huge map of Europe.

Robert Sturua, the director, has used the Round House to full advantage, finding a



Ramaz Chkhikvadze

Leonard Burt

wonderful sense of space between his characters and yet I have ever seen and, since I never allowing us to miss telling moments of gesture and expression. This is the best company of middle-aged actors I have ever seen and, since I first saw them three years ago in Mexico, my enthusiasm for them is quite undiminished.

Festival Hall

Barenboim

by DOMINIC GILL

I have written here at length on many occasions of my admiration for Barenboim—and also of my reservations, which have made that admiration sometimes less than complete. His huge survey in seven recitals this season of "Great masterpieces of the keyboard" is a massive tour de force, and the finest things in it so far have been very fine. But the best has been regularly mixed with the second best, and though Barenboim's second best is good and stimulating enough to be acceptable from many another excellent pianist, from him it is a disappointment. By the uncommonly high standards we demand of him—and if they seem ungenerous, they are actually the highest compliment—the play far too often less well than he ought.

On Monday evening, the fifth recital of his series was an

exact repeat, except for one work of the all-Chopin programme he gave in the same hall just over eight years ago. It was once more, as then, in general terms a vigorous success; nothing went seriously wrong, and much went splendidly right. Yet almost from first to last, with one or two notable exceptions, the playing lacked just that degree of close focus, of close, careful working that could have made it superb—lacked, in a single subjective word, magic.

It was not a matter of notes at all, or of tempi, dots and slurs, but attitudes and effects. Barenboim's performances were strong and clever, with all the right superficial attributes, and many more profound ones, which nonetheless rarely moved. There were fine things in the sonata, too: the Funeral March especially.

There was one powerful sense of fresh adventure and discovery—as if the matter of playing Chopin had become so easy, so natural and automatic, that the key to every piece was to be discovered directly now with no more than the shrug of a brilliant reflex.

Barenboim cannot touch the keyboard without making a beautiful sound; if we had come for the sonority alone, it would have been an evening of unalloyed delight. The tone of his F minor Fantasy was sombre, very grand—the tempo very grave; and the sound-world of the little rarely-heard C minor (op. posth.) Nocturne that he slipped in between the Fantasy and the B flat minor sonata was a ravishing contrast—a single dimension of coolness, dark and delicate. There were fine things in the sonata, too: the Funeral March especially.

delivered straight as a die, and the brilliant sotto voce whirl of the finale, without any Russian windy surges (more brilliant still if as much attention had been paid to the left hand as to the right).

There were jewelled sonorities in plenty also in the Berceuse and Barcarolle; but Barenboim can play like this in his sleep—the sound, apart, there was little special to the performance, no individual quality or line. Suddenly, the focus drew close: if there had been no more than a fraction of the detail and distilled poetry in the rest of the concert that Barenboim found in the A minor Waltz (never mind the funeral tempo), it would have been a different evening entirely. But his finale of the A flat Polonaise was no more than routine slick—and inaccurate slick at that.

Teatro San Carlo, Naples

Il duca d'Alba

by WILLIAM WEAVER

The Teatro San Carlo, like every Italian opera house, has been having a hard time these past few years. In addition to the financial difficulties that beset every cultural institution in the country, the great Neapolitan theatre has had to face continuing managerial problems. At the present writing it still lacks a General Manager, and is being administered by a Rome-appointed commissioner (the appointment of a Sovrintendente apparently will have to wait until after the next elections, since the position has, inevitably, become political). The San Carlo does, however, have an artistic consultant, the musicologist Rubino Profeta, and an artistic director, the conductor Elio Boncompagni; and so a programme was devised for the 1979-80 season, which opened on schedule, just after Christmas.

The inaugural opera, which is still running, was Donizetti's *Il duca d'Alba*, in a new production designed by Fiorella Marianni and staged by Franco Enriquez. The opera had not been heard in Naples since April, 1882, when it was given less than a month after its posthumous premiere at the

Teatro Apollo in Rome. As a matter of fact, after the 1880s, *Il duca d'Alba*—which the composer had left not quite completed at his death—disappeared from the Italian stage altogether until Thomas Schippers came upon the score and presented it at the Spoleto festival in 1959. Since then it has been revived on various occasions and has become a familiar, if not a standard, play of the repertoire.

It is not quite clear why Donizetti abandoned this score, but when he did put it aside, he appropriated its best number, the tenor aria "Spirto gentil," for *La favorita*, which he was writing at the same time. Still, even without that lovely piece (replaced with "Angelo casto e bel," written by Donizetti's pupil Matteo Salvi, charged with preparing performing score in the 1880s), *Il duca d'Alba* is a thoroughly likeable work, with some stirring pages. In Spoleto, under the fiery and totally convinced direction of Schippers, those pages came to vivid life; and the whole opera was profoundly moving, exciting.

In Naples, the conductor Anton Guadagno gave a less impassioned reading, and

several scenes did not have their full impact. Among these were the Verdian outburst of the tenor in Act I, scene 2, "Libertà, libertà, gran diva"; and the vigorous martial music that opens, and then closes, the last act. Still, the performance was never stagnant; and if *Il duca d'Alba* is not supreme Donizetti, not on a level with, say, *Lucrèce Borgia* or *Anna Bolena*, it is still a masterly work, and this Naples performance demonstrated as much.

Guadagno led, in any event, a coherent performance; and the San Carlo orchestra, not always a reliable instrument, played well for him. The chorus sounded a bit less secure, but was still acceptable; and the cast was also good. It was headed by Angeles Gulia, who sang the part of Amelia d'Elmont. Gulia's voice is as big and opulent as ever, but not quite so unruly as it has been in the past.

Ottavio Garaventa, the tenor, was less effective as the romantic hero Marcello di Bruges. But, though he lacked vocal power, he did not lack taste, and he had the good sense not to force his voice beyond

its pleasant, if modest capacity. In the role of the Duke, Silvano Carroli seemed slightly uneasy during his first appearance, but then settled down and gave a sober, elegant interpretation.

Twenty years ago, when Visconti was preparing to produce the Schippers *Duca d'Alba* for Spoleto, he miraculously discovered, intact, nearly all the sets designed by Carlo Ferraris for the 1882 premiere, preserved in a Roman warehouse. They were handsome and still serviceable, and Visconti immediately put them to use; they were subsequently seen in other Italian revivals. Fiorella Marianni's new scenery was nearly as good-looking (this is high praise) and a good deal more agile, so scene-changes were rapid.

The other great event in Naples at present is the "Civiltà del '700 a Napoli," a series of exhibitions illustrating the arts and the life of the city under the first Bourbon rulers. Not all the shows are yet open and they will continue until next October, so there will be ample time to describe them later.



David Rintoul and Elizabeth Garvie in "Pride and Prejudice"

Festival Hall

London Symphony

by DAVID MURRAY

Having chosen to mark Mozart's birthday on Monday by performing the *Jupiter Symphony* and the grand, unfinished C minor *Mass*, Claudio Abbado and the LSO offered a tribute that was deeply respectful rather than joyous. The *Jupiter* was sedulously prepared, with every phrase-end neatly trimmed. There was no suggestion of pomp, and the discreetly reduced strings were matched by only the prescribed number of winds. With the close attention of his players, Abbado achieved a positively analytical balance: unusually many voices were delicately

audible in the development of the *Allegro vivace*, and very lightly touched quavers in the *Menuetto* kept it bright and airborne.

The Finales seemed, all the same, something less than the triumphant invention it is. One expected rare transparency for its exuberant counterpoint, but in fact it emerged temperate and not especially vivid. Certainly there was no slackness in the playing; the trouble, I thought, was that the careful characterisation of the tunes was all externally imposed—nobody's attack sprang from any vital instinct. Abbado may have taken too much care.

No less care had been expended on the *Mass* (sung by a very large London Symphony Chorus, extremely well, in the Robbins-London edition), and there the result was imposing indeed. What often seems the less interesting sections of the work (relatively speaking: there is really nothing weak in it) were powerfully shaped and telling, without manufactured drama—in stern music, Abbado is splendid, and the *Qui tollis* was colossal.

Unfortunately his epic sobriety infected his soprano soloists too. Margaret Price, in luminous voice despite a hint of breathiness, untypical of her best form, sounded lovely in the *Christe eleison*, but she took the operatically ravishing *Et incarnatus* as if it belonged to Bach cantata: beautiful to hear, but all pious restraint, with the florid passages slowly and solemnly delivered.

The *Laudamus* to went to Fredericka von Stade—frail, charming and very cautious; since she and Miss Price were decisively ill-matched in the ecstatic *Domine Deus* duet, there was no thrill in their entwined soaring. A human dimension of the *Mass* was lost, then; but its monumental side was grandly displayed, and there were great rewards in that.

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Divisions in Islam

THE OUTCOME of the extraordinary session of the Islamic Conference in Islamabad was in many ways characteristic of that organisation and of what has become known popularly as the resurgence of Islam. In short, it showed that there was far from unanimity among the states there, and that, as a formal organisation, it probably wields less power than it claims.

Olympics

The U.S. could take some comfort from the forthright condemnation of the Soviet invasion of Afghanistan and the demand for the withdrawal of troops. But the conference stopped short of coming out openly against participation in the Olympic Games in Moscow.

Furthermore, the final statement of the conference was drawn up in the absence of some of the militant Arab states most opposed to the Camp David agreements between Egypt and Israel. Syria, for instance, did not attend, preferring to play host to Mr. Andrei Gromyko. Some of its fellow Arab militants stayed away to avoid being openly opposed to the Soviet Union.

Insult

Even among the participants there is a clear reluctance to align themselves with the U.S. Although most members of the Islamic Conference probably regard the taking of the U.S. hostages in Tehran and many of Ayatollah Khomeini's policies as discrediting Islam, the opportunity to strengthen the position of Islamic countries against the Soviet Union was evaded.

Influence

On the face of it, the 41 States which make up the Islamic Conference should have strong claims for international political influence. The populations of these predominantly Moslem countries total about 700m. They include some of the major oil producers and members of OPEC. If co-ordinated, their vote in the UN General Assembly could be crucial. Geographically, these Moslem countries cut a broad swathe across the globe.

The size of their population, their wealth stemming from oil and the investment of surpluses in the West, have given material backing to the feeling, stimulated by the Arab military performance in the 1973 war with Israel, that Islam is

on the rise again after years of psychological inferiority—first at the hands of the British and the French and more recently Israel.

But the Islamic Conference is fundamentally a disunited body. First, its membership is far from comprehensive, omitting for example the 80m or so Moslems in India, and a somewhat lower number in the Soviet Union. Second, the Islamic world itself is far from being homogeneous. It is a strength of Islam that it has been able to absorb peoples of such varying ethnic and cultural backgrounds. But this is also a weakness as it means the Islamic movement can never be monolithic.

Third, the economic and population disparities are enormous—ranging from Indonesia's 130m to Qatar's 0.2m from Kuwait's per capita GNP of \$12,700 to Niger's \$220. Behind these differences lies also the resentment that the very rich have not done as much as they could to help the poor. Fourth, like most developing countries, the Islamic States are deeply reluctant to be drawn into making a decisive choice between the two superpowers—the U.S. and the Soviet Union—even in the event of outright invasion.

Insult

Finally, the Islamic countries are largely hostile to the bilateral agreement between Egypt and Israel. Indeed, because of this treaty Egypt's conference membership was suspended last year. President Sadat in his Monday speech did not help here. In theory, the invasion of Afghanistan opened the way for a possible rapprochement with countries as Saudi Arabia and eventual rehabilitation in the Arab world. But while Mr. Sadat ordered the cut back of the Soviet Embassy in Cairo from 50 to seven members, he gratuitously insulted the Saudis, accusing them of playing off Washington and Moscow, and thereby making it harder for Riyadh to press U.S. interests in Islamabad. Thus, while Islam may be a force powerful enough to overthrow the Shah and shake the House of Saud through the occupation of the Great Mosque in Mecca last November, as a co-ordinated, and formal international political force it remains weak and divided.

Reacting to oil price rises

SCARCELY EVER have governments and economists all over the world been so unanimous about a major economic issue as they are today about the danger and futility of a deflationary response to the latest round of OPEC oil price increases. On Monday, just as President Carter was presenting a Budget which was commendably cautious for an election year, the British Chancellor and Mr. Emile van Lennep, Secretary-General of the OECD, were speaking to groups of economists in almost identical terms, expressing satisfaction at the way that most developed countries are determined to avoid the inflationary mistakes which they made after the 1973 oil crisis.

Tax systems

It must be encouraging to the British Government to find that the OECD, which is traditionally a "Keynesian" institution and which in 1973 strongly advocated deflation to compensate for the demand deficiency imposed on the world economy by OPEC savings, has come round to the view that inflation, rather than deflation, is the greatest danger facing the world economy. It must similarly be encouraging to President Carter to find Mr. van Lennep stressing that, under no circumstances must consumers be protected from rising energy costs. Indeed Mr. van Lennep believes that governments should act through their tax systems to ensure that energy prices go on rising in real terms even if energy demand begins to slacken or if the OPEC price structure weakens.

But Mr. van Lennep takes his analysis further, in a direction which casts an interesting light on the policies being pursued in Britain and elsewhere. It is to offset the inevitably inflationary effects of increasing energy prices that Governments have to deflate their economies. But the particular way that deflation is brought about is a vital part of the recipe for economic success. An economy can only be returned to a path of sustainable growth if it "ends up with a relationship between costs and prices sufficiently favourable to profits" to ensure that investment is undertaken despite a "chilly economic environment."

If OPEC surpluses were

matched by investment, rather than consumption, in the non-oil producing countries, the world economy could return to a path of non-inflationary growth. And it is, in Mr. van Lennep's view, the success or failure of various countries in achieving the right relationship between costs and prices after the shock of the 1973 oil crisis, that has largely determined their prosperity since then.

In the latest boom in oil prices, Britain is uniquely privileged because of its self-sufficiency in oil. This ensures that higher oil prices do not lead to a loss of income for the nation as a whole. They do, however, produce a transfer of resources away from the non-energy sectors of the economy towards the energy sector. This means, in effect, the Government, which will be receiving steadily growing revenues from royalties and Petroleum Revenue Tax. The key to Britain's current economic predicament is to find ways of ensuring that the gains of the energy sector are channelled back to the non-energy sector in such a way as to sustain profits. The danger which is all too evident from current trends in corporate profits is that the impact on the non-energy sectors will be borne by profits, rather than wages, while the gains to the non-energy sector, as tax revenues are channelled back, will go also to the personal sector.

Free market

The difficulty which this analysis brings out very clearly is that it is in "achieving a cost and price structure which is favourable to investment that the existing instruments of economic policy seem most inadequate." On this fundamental point it is clear that the OECD has not yet come to share the British Government's free market views. Indeed Mr. van Lennep believes that "the main moral to be drawn from looking at the experience of different countries is that policy should be focused on achieving the proper relationship between domestic costs and prices." Unfortunately in Britain incomes policies of every kind have been tried and have failed. The question now is whether the Government's fiscal and monetary policies will have the desired effect.

A WAR tremor has been felt in the U.S. during the past couple of weeks; not an earthquake by any means and not one always easily detectable on the Richter scale.

The manifestations have been disparate: the jingoistic cheers from members of Congress when President Carter told them in his State of the Union message that the U.S. would defend, by force if necessary, the integrity of the Gulf and that he was proposing recommitting registration for national military service; conversations of a colleague with a farmer in Iowa afraid for the future of his grandchildren (boys and girls) and with friends in New York, the latter perhaps overinfluenced by the hysterical treatment accorded international crises in certain newspaper articles; the occasional worried article by normally pragmatic journalists even in normally sober newspapers, such as the Los Angeles Times. In a sense even the rallying round President Carter reflects this fear.

Some politicians have picked up the vibrations. Senator Edward Kennedy, his presidential ambitions suddenly clouded over by his defeat in last week's Iowa caucuses, thought the President was to blame. In what was for the Senator a crucial speech on Monday at Georgetown University in Washington, in which he assailed the President from the Left domestically and, at times, from the Right in foreign policy, he wondered whether the Soviet invasion of Afghanistan really ranked with two Berlin crises, the Korean war, the takeover of Hungary and the Cuban missile confrontation and the Vietnam war as, in Mr. Carter's words "the gravest threat to peace since World War II."

Caustically, Mr. Kennedy commented in his frontal assault: "Exaggeration and hyperbole are the enemies of sensible foreign policy... Exaggerated dangers and empty symbols will not resolve a foreign crisis... We cannot afford a foreign policy based on the pangs of unrequited love" (of Mr. Carter for President Brezhnev).

Similarly, feeling from the aftermath of Iowa, Mr. Ronald Reagan, no longer the overwhelming favourite to win the Republican presidential nomination, sought to revive his fortunes by offering his audiences some traditional red meat. The U.S., he declared, should forget about Salt I and Salt II and re-arm vigorously. While Mr. Kennedy criticised Mr. Carter's alleged vacillations and misjudgments, Mr. Reagan raised again the spectre of appeasement and likened the President's record to the tapping of Neville Chamberlain's knuckles on the cobblestones of Munich.

Interestingly, when the spectacular rhetoric and retrospective criticism are stripped away, neither Mr. Kennedy, Mr. Reagan nor, come to that, anybody else has come forward with a substantially different forward-looking foreign policy prescription from that outlined by the President in his State of the Union message last week. Senator Kennedy's six point programme—accompanied by the plea that detente must not be condemned to premature extinction—could have been written, with a few word changes here and there, in the White House. He was more insistent than the President in advocating that Iran's grievances against the Shah be given proper airing, but only in degree.

Indeed, from Left and Right of the political spectrum, there seems agreement on the new principles of American foreign policy: that national defence be enhanced (Congress may even add to, rather than subtract from, the proposed \$15bn real increase of defence spending proposed in next year's budget); that the Gulf, however its boundaries are defined, must be protected against Soviet incursion; that the allies must hang together, not be hanged separately, and that the U.S. has been presented with a distinct opportunity to exploit, by assorted means, what it believes to have been Moscow's mistake of invading Afghanistan.

Illusory show of strength

Yet President Carter must know he is riding a tiger. His smashing victory in Iowa and the lead he is now given for the forthcoming primaries in New England, Mr. Kennedy's home turf, are probably illusory indications of strength, reflecting public discontent with the Kennedy candidacy more than happiness with Mr. Carter's performance as President. Some polls are beginning to show national impatience that after nearly three months 50 Americans are still being held in Tehran; and an apparently revived Republican Party is beginning to snap at the President's heels. It is, therefore, necessary, politically, for Mr. Carter to retain the foreign policy initiative.

That will not be easy. The most obvious reading of the new direction in American foreign policy, apart from the explicitness of the warning to Moscow to keep its hands off the Gulf, is its very vagueness. It is a quantum leap for the U.S. to unfold its protective umbrella over the Gulf, as it has over Western Europe and Japan. But deliberately, for reasons of flexibility, the Administration is not saying who is covered, or to what extent, or even by what, or what circumstances would have to prevail for that protection to be effective. This very flexibility may not satisfy either the domestic or foreign audience for very long.

Perhaps even more clearly than in the State of the Union

message, the new doctrine was recently best spelled out in a newspaper interview given by Dr. Zbigniew Brzezinski, its principal architect. Although the State Department and other Administration officials may hold the National Security Adviser in dubious regard, they do not dissent in substance from the arguments he puts forth.

For a start, he stresses that the U.S. does not envisage a relatively homogeneous NATO-like alliance in the Gulf region (or South West Asia, the preferred description here). "We have to be sensitive," he said, "to the desire for independence and distinctive identity of some of the countries concerned—and also to the significant ideological differences among the countries. We are none the less prepared, recognising these nuances, to work to create a cooperative security framework for the region in a variety of ways."

Translated, this seems to mean, for example, that the U.S. is prepared to foster new relationships with nations like Libya and Iran, with which it has tensions, but no inherent quarrel, as well as with their ideological mirror image, Saudi Arabia, the security of whose ruling monarchy is of genuine concern to Washington. It means shoring up Pakistan (which Dr. Brzezinski himself and the Under Secretary of State, Mr. Warren Christopher will visit later this week) without alienating its traditional enemy, India (the target of a mission by a veteran diplomat, Mr. Clark Clifford).

It means increased aid to Morocco, stepped up again only last week, to fight the Polisario guerrillas without giving offence to Algeria and thus jeopardising valuable western energy contracts. It means helping Turkey, whose new Prime Minister, Mr. Suleyman Demirel, has, in his latest economic package, gone some way to meeting the demands of his western creditors, without pushing Greece too far. It means closer ties with Somalia without sacrificing the possibility of some day coming to terms with its neighbour, Ethiopia. In each and every case, the balancing act will be difficult in some it may be impossible.

It also entails renewing commitments to America's strongest friends in the region—Israel, Egypt, Jordan and Saudi Arabia. But there is a simultaneous recognition that a failure to overcome Israeli opposition to a resolution of the Palestinian problem and the status of Jerusalem could vitiate the whole effort.

There remains, too, the particular and still central problem of Iran. The U.S. has delayed implementing economic sanctions against Iran in the hope that Tehran will appreciate that the real threat to its integrity now emanates from the Soviet Union, not the West. There is guarded optimism that the victory in the Iranian presidential elections of Dr. Abol



Soviet President Leonid Brezhnev kisses the cheek of President Carter at the signing of Salt 2 in Vienna last June: the "unrequited love" of Senator Kennedy's jibe.

Hassan Bani-Sadr, who is seen here as a relative moderate, will increase the chances of an early release of the hostages in the U.S. embassy and that the Islamic summit in Islamabad will further push Iran in the direction of resolving the impasse with the U.S.

But, as Dr. Brzezinski acknowledged, nuances in the diplomatic approach are complex in the extreme. The second aspect of the new U.S. posture is equally problematical—the possible use of American military force and the circumstances in which it might be deployed.

A conspicuous omission from the State of the Union message was any reference to what the U.S. would do if the stability of a country in the area was threatened by internal revolution rather than from outside. There have been reports that President Carter nearly referred to the oilfields of the Gulf, rather than to the Gulf itself, as being in the vital interests of the U.S. If true, that implies that, above all, the U.S. would not stand by and watch Saudi Arabia disintegrate in a new generation of transport aircraft and support ships, a good five years away from full scale disposition. The U.S. is not exactly powerful.

less in the interim with two naval carrier task forces equipped with substantial aerial firepower, already in the Arabian Sea, with two U.S.-based mobile divisions, and some battalions on standby in Europe and the Pacific. The U.S. is also seeking to negotiate air and sea based facilities that it can use in extreme need, though there is doubt whether that can be easily arranged in Somalia, Oman and Kenya. In any event, present forces are limited in effect to quick strikes or temporary holding actions in conventional warfare.

The U.S. also does not want to be seen to be abandoning, at the drop of an Afghan hat, the human rights policies which, qualified or not in recent years, it still sees as a potent weapon in the ideological war with the Soviet Union. The internal exile imposed on Dr. Andrei Sakharov, to whom it will be recalled, President Carter sent a personal letter shortly after assuming office, does give the U.S. a further opportunity to present to the Third World at large, and the Gulf in particular, the contrast between American and Russian approach to human rights. But that, too, could be weakened if the U.S. is perceived as propping up unsavoury and already unstable right wing regimes merely in the interest of securing the West's oil lifeline.

But the subtle challenges of implementing the new policies have to be set in the more simplistic domestic context. The Administration, for example, seems much more relaxed than the Congress about the level of co-operation it is getting from the western allies in the cases of both Iran and Afghanistan. The Congress, on the verge of recommending that the U.S. boycott the summer Olympics in Moscow, is likely to be incensed if France, West Germany, Japan or others fail to follow suit, apparently undermining the U.S. moral case. The country is indeed in a strange mood: a once diffident President is talking tough and profiting politically from the conversion; his liberal opponent has taken to quoting Theodore Roosevelt, the "big boy" of the "big boys" club, by conservatives; an isolationist Congress has turned interventionist; and war tremors have been felt. In the process, such signals as are still emanating to Moscow that the U.S. does not want to embark on escalation of the arms race have got lost. It would probably be unwise to overestimate the depth and permanence of U.S. belligerence. Missile-fleeting may be popular now, but maybe not to the point of actually dispatching American troops once again to fight in some far-flung and little-understood corner of the world for a cause that seems obscure. President Carter himself clearly does not want to go so far, but has concluded, no matter how reluctantly, that the line had to be drawn somewhere.

MEN AND MATTERS

Engaged again... at 67

"I still have my wits about me and I find I do not have enough to keep me engaged." That was how Sir Monty Finniston explained to me yesterday his decision to establish a brand new business at the ripe age of 67. "Nobody believes my age; even I don't believe it. And I certainly refuse to acknowledge it."

To demonstrate his disbelief, the former chairman of British Steel—now recently renowned as the man responsible for a widely-acclaimed report on the future of engineering—has set himself up as a one-man consultancy company under the modest title of H. M. Finniston Ltd. With three "substantial" engineering companies on his books already, Sir Monty is gruffly confident that the list of clients will grow and his enterprise will expand rapidly.

"I am prepared to do anything where I can use my industrial and metallurgical experience," he said. But he

will not, it seems, tackle any jobs which might be developed from his report. He firmly quashed rumours that he was likely to capitalise on a quango called the Engineering Authority, which may be formed to administer recommendations of the Finniston report. "That has still got a lot of hoops to go through. But it is not for me. It is definitely a job for a younger man. Any one who takes that on must be prepared to stick with it for at least five or 10 years. Which gives at least some indication of what Sir Monty plans to engage his wits in gentler pursuits."

Bunkered

These are hardly the most auspicious times for local authorities, few of which can afford to succeed at a £150,000 windfall. But there are some who have misgivings about the manner in which the district council for mid-Sussex has come into a prize of roughly this proportion.

It will become reality when the council disposes of Beech Farm, Cuckfield, a 200-acre holding farmed by one Cecil Ray, who inherited the tenancy from his mother. The council bought the farm in 1974 for around £100,000 with the intention of "converting it for recreational purposes." The idea was apparently to build a "leisure complex" and a golf course. There was also talk of a caravan site. The council duly gave itself permission to change the use of the land and, as a result, had the right to evict Ray. He was served with notice to quit—though he continued to farm under licence—and was compensated with what his agents describe as "a derisory amount" under the Agricultural Holdings Act.

By November 1978, however, the council had announced that it could no longer afford a golf course, let alone a leisure complex. After a long deliberation in closed session last month it voted to sell the farm with vacant possession.

At current freehold prices the farm should fetch around £250,000, compared with £125,000 to £180,000 with a tenant farmer still in situ. A man in his late 50s who is in ill health, Ray is reported to be "very upset."

His agent, Richard Wainwright, of Strutt and Parker, says the council appears to be perfectly within its rights, "but just from a common sense point of view it does seem a bit hard." More partisan in tone, Laurence Woodham, chairman of the East Sussex branch of the National Farmers' Union, describes the position as "immoral and unprincipled." He is pressing for Ray to be reinstated on his farm, a possibility that will no doubt come up when the council's policy committee meets tonight and discusses the affair.

For the moment, however, senior officials prepared to discuss the case appear to be fairly thin on the ground.

Wax or wane

It is not only stockbrokers and pundits who have to scrutinise the newspapers these days. Over at Madam Tussaud's they are anxious not to waste good money on immortalising the soon-to-be-forgotten in wax, nor to miss out any rising stars. The management enlists some help from its visitors by sending out a questionnaire asking who are their favourite heroes, objects of hate, pin-ups and entertainers.

The results, published yesterday, are in some cases surprising. Mrs. Thatcher made it into Jimmy Carter during 1979 to become Britain's favourite politician, which is not all that odd, but creeping up behind her are new favourites, Liberal MP Cyril Smith (who would cost a fortune to model and has not been yet) and the deceased J. F. Kennedy.

Ayatollah Khomeini became the favourite object of hate, displacing Hitler to third place, behind President Amin. The Yorkshire Ripper follows close behind, displacing Jack the Rip-

per. The Ayatollah is viewable only in the flesh. "We'll wait a few more months," said a spokeswoman. "His health, you know—and we'll have to see what happens in Iran."

This cautious policy has paid off in the beauty stakes. Farrah Fawcett-Majors, the darling of two summers ago, has now vanished from the front-running five (led again by Sophia Loren). Brigitte Bardot has returned to number 3, but the museum has removed its 1967 model altogether and not yet sought a fresh sitting. Could not a few handfuls of wax be added in appropriate places? "No, no," said the spokeswoman in horrified tones. "If we do bring her up to date we'll start from scratch."

Certain models prove most co-operative about clothing. I hear the Shah donated a large part of his wardrobe, and Mrs. Thatcher a pair of sensible court shoes.

Hibernating?

Brummie accountant Brian Mogford, not in the least affronted by my recent jokes at the expense of his profession or his home town, called me gleefully yesterday with a contribution of his own. He had just put the phone down on a senior official at the Birmingham Post Office who had explained at some length the reasons for his having to wait three months for the installation of a small switchboard in his office. In future, Mogford was asked, would he please direct his inquiries to the sales representative concerned—a Mr. Tortiss.

Injury time

They have a different way of doing things north of Watford. The newsletter of the Evesham chamber of commerce informs me that "traffic wardens are being run down as a policy of economy."

Observer

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The lure of building cars abroad

AS REPRESENTATIVES of the Japanese and UK motor industries meet this week for an exchange of views in the sunshine of Acapulco it is difficult to judge which of the two industries is the more worried, in its own way, about the future.

The UK industry has to struggle with the problems of survival, the Japanese with the difficulties of being too successful in their major export markets, the U.S. and Europe.

Japan's two major motor groups, Toyota and Nissan, so far both remain basically national in terms of manufacturing bases yet have become multinational in terms of marketing, distribution and sales. For several years they have been under pressure to set up at least a little manufacturing capacity in those markets they have penetrated so deeply. At least in 1980, the signs are that they are going to do something about it.

The current talks in Mexico illustrate the problems the Japanese will meet in European car markets if they persist in exporting built-up vehicles.

The British industrialists will make it clear they want the Japanese to continue to restrict themselves to a 10 per cent UK market share. Although this would be a "voluntary" move, the Japanese are well aware that both the UK Government and the Common Market Commission are taking a close interest in the outcome of the discussions.

Total sales in the UK market will almost certainly be lower this year so registrations of Japanese cars will fall in line with the market if, as expected, they continue to keep down market share.

In the other major car markets of Europe the Japanese have similar problems. Italy has an agreement made before the Treaty of Rome and so is able to restrict imports to a

mere 1,000 Japanese cars each year. There is nothing formal in the French arrangement. But the Japanese have been told politely that a 3 per cent market share is all that will be tolerated.

Until very recently the Germans were congratulating themselves that they did not have to have any written or unwritten agreements with the Japanese because customers did not seem to be interested in buying Japanese cars. But that has now changed: Japanese penetration of the market is heading towards 5 per cent. This trend has been underlined by the sudden shift in preference towards cars with smaller engines (under 1,600 cc) throughout Europe, the sector of the market in which the Japanese concentrate nearly all their efforts.

So now even the Germans have good reason to join in the rumble of criticism aimed at the Japanese from Europe about the massive imbalance in automotive trade. Last year the Japanese sent about 650,000 cars to Europe, only 50,000 went in the other direction.

In 1978 Japan exported around \$170-million worth of motor vehicles and parts against imports of \$1bn. Nearly half the export total, \$80m, went to the U.S. and in return Japan bought a negligible \$200m-worth of cars exported from Japan ended up on American roads.

No wonder there has been an outcry in the U.S. not only from the unions, which could have been expected to complain about the Japanese "taking American jobs" but also from management in the terms of both Mr. Henry Ford II and Mr. Thomas Murphy, chairman of General Motors, who said recently: "If they (the Japanese) are going to be as big a factor in the U.S. market as they have been, then I think it is high time they

built plants and brought some employment opportunities here."

It is not only the undoubtedly efficiency of the Japanese industry or the fact that it is offering exactly the type of cars the major markets currently demand—small and economical—that has kept its exports rising.

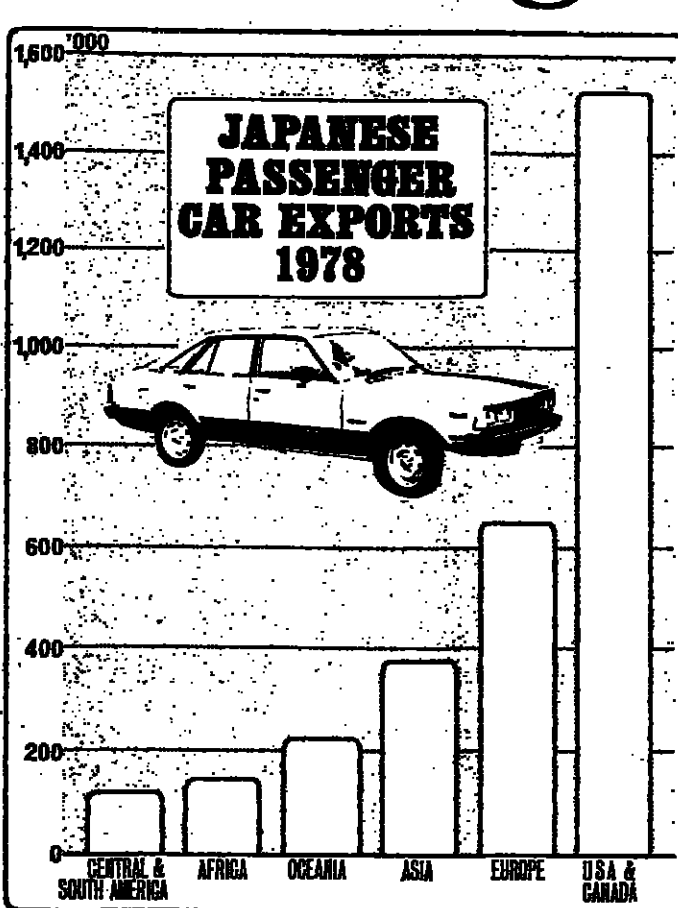
During the past year the Japanese currency has been devalued considerably, by 23 per cent against the dollar (down from ¥239 to ¥194) and 34 per cent against the pound (from ¥332 to ¥238) between January of 1978 and December 1978. European motor manufacturers feel sure this is part of a deliberate Japanese Government policy to support exporters. The Japanese Government has a much tighter control over the country's financial institutions (partly because the Yen is not an "international" currency) and is therefore able to manipulate the value of the currency with less difficulty than the U.S. or British authorities.

"Japan is seeking to solve its problems by massive devaluation. It is buying its way into the rest of the world's markets," commented one irate UK industry executive.

Although the issue affects Japan's trading position with the rest of the world as a whole, the policy has been of particular value to car exporters because, whereas the Japanese have ventured out with overseas manufacture in industries such as electronics, car makers have stayed resolutely at home.

The Japanese car industry exploded from being a negligible part of the economy to a major element in less than a decade. New car registrations in 1968 were only 740,000. By 1973 they reached a peak 2.9m and, after a post-crisis lull, have since regained that level again.

The Japanese industry benefited from its late start because it did not hesitate to learn from others, borrowing the best tech-



nology and practices and adapting them to suit its own requirements.

It expanded on the back of a booming home market, and protected by non-tariff barriers the industry developed the economies of scale and high productivity on which to base its export effort.

Throughout the 1970s the Japanese manufacturers carefully and systematically identified prime export targets and single-mindedly set about exploiting them. The U.S. was the main target.

In 1967 the Japanese exported fewer than 250,000 cars. This had jumped to 1.3m by 1971 and by the end of the 1970s was up to well over 3m. Toyota alone last year exported 1.37m cars and expects this to rise to over 1.5m in 1980. Nissan is not far behind.

Virtually all the production experience of their two companies is confined to Japan. Hence their ability to establish a major manufacturing presence in another environment with different traditions and outlooks can reasonably be questioned.

It was no surprise, therefore, that Honda, a Johnny-come-lately in the car business even by Japanese standards, should be setting the pace overseas rather than the two giants. It already has a motor cycle assembly plant in the U.S. and while Toyota and Nissan do the rounds once again making further "studies" to see where they should set up U.S. manufacturing facilities, Honda has announced it will set up a car plant near Columbus, Ohio. Honda built its first car in Japan only in 1962 and exported the first one to the U.S. in 1970.

The decision came hard on the heels of the agreement with B.L. of the UK to develop jointly a car which gives Honda at least a tenuous manufacturing foothold in the Common Market and might very well lead to much bigger things.

For Toyota and Nissan one obstacle to a manufacturing base in the U.S. is that, although their exports are high in total, they are made up of several models from each group. For example, Nissan sells ten different types of car in the States so it would not be worth while setting up a plant for one model as Volkswagen has done with its Golf-Rabbit plant.

However, Nissan has been testing methods it plans to use in America at its plant at Zama about 50 miles from Tokyo. For production to be economic in the U.S. Nissan would have to run many models down one automated welding line with mechanical units and probably pressings being shipped from the highly-automated plants in Japan. It would have to be careful, though, because local content in the U.S. must total half by value before a car loses its "imported" tag.

In the event Nissan has chosen to try commercial vehicle assembly in the States first and has said it will set up a plant to produce 10,000 trucks a year "somewhere in the West."

Trucks give fewer problems on the assembly lines than high-volume cars but Nissan was also influenced by the possibility that the U.S. authorities might insist that the Japanese pay the standard 25 per cent import duty on small trucks. Up to now the Japanese have managed to pay only the 4 per cent which applies to motor parts by the simple expedient of shipping truck cabs and chassis separately and simply bolting them together when they arrive in the States.

Undoubtedly the growing political pressure against Japanese vehicle imports into the U.S. played its part in Nissan's decision. The group intends to assemble trucks from knocked-down kits supplied from Japan and as one American motor industry executive said: "Shipping truck kits from Japan to the middle of America just can't be an economic proposition." Nissan maintains, however, that locally made parts will be incorporated gradually as suppliers are found.

Suitable base

In Europe both Toyota and Nissan appear to see Spain as the most suitable base.

Nissan bought Massey-Ferguson's 36 per cent shareholding in Motor Iberica, Spain's second-largest truck making business, earlier this month for \$40m.

Iberica eventually could be used as the base for Nissan to make its own trucks in Europe—but that is at least a year or so away; much to the surprise of the Spaniards, Nissan has suggested Iberica could serve as a base for its car production, too.

Nissan has also been forging technological links with European manufacturers. It has been having talks with Alfa Romeo in Italy and has actually been commissioned by Citroen of France (part of the PSA world wide industry.

Peugeot-Citroen combine) to do a study on anti-pollution measures in Japan.

Compared with this, Toyota's progress in both the U.S. and Europe seems sluggish. The inevitable "feasibility studies" are being made. In Europe Toyota has been looking mainly at Spain, although it was persuaded also to consider the UK as a manufacturing base by some component makers who see Japanese entry as one way of partially reviving the motor industry in Britain.

Thus the Common Market co-ordinated policy about the so-called Japanese threat. This is something the Japanese find confusing, particularly as they have to take great care to prepare the way politically for a major venture outside Japan.

Toyota has been "courted" by every State in the U.S. apart from Alaska and Hawaii, all of them interested in the employment a major car assembly plant would provide. But some people in the industry suggest that Toyota might be hiding its time to see if Chrysler survives its current crisis. If the financial collapse of Chrysler becomes inevitable, Toyota might well want to pick up some of the pieces. This course would have its attraction for Nissan, too.

The ill-health of the American group is proving to be something of an embarrassment to Mitsubishi, maker of Colt cars, because the two are still firmly linked via a 15 per cent shareholding Chrysler owns in the Japanese group. Mitsubishi would like to get on with building both market share and, possibly, manufacture in the U.S.

There is no doubt that the Japanese industry is approaching a critical phase in its development. Toyota and Nissan in particular are having to make a fundamental reappraisal of their position in the world wide industry.

Letters to the Editor

An exchange of views

From Mr. N. Stacey
Sir—One of the more recent, recurring controversies hitting the headlines is about appointing senior retired civil servants to senior positions in business. As mentioned in your column of January 28, as this issue is to be examined by a committee of the Commons—no less—the impression that there is something which needs searching scrutiny is difficult to avoid.

I assume that what is to be questioned by the committee is not the desirability of the employment of ex-mandarins after leaving the civil service, but whether or not their employers would gain confidential information whereby they could profit. Of course, too civil servants possess knowledge of governmental intentions but such information is a rapidly wasting asset: because government policy constantly changes, and because the ex-civil servant is unlikely to be employed in a firm where such specific knowledge would come in useful. In any case, why should it be assumed that the probity, honesty and integrity of such people would change overnight on leaving the civil service?

To my mind the pity is that there is so little interchange throughout the whole of the occupational pyramid. The core of the argument is that business is benefiting from the counsel of seasoned men with government experience—in the same way as government is currently benefiting from the experience of seasoned and successful businessmen. Why could this quite successful process not be

widened by seconding civil servants in mid-career—and not at the end of it—for industrial employment?

But why stop at civil servants? University teachers in business and economics, just as much as in the other sciences, would benefit from a two or three-year stint of experience in business. They might learn about business realities, risk-taking and financial constraints not easily available from textbooks or argument. And the business executive could significantly gain from a 20th century grand tour in the universities, or in government or in the institutions—thereby better understanding the "corridors of power" or academic approaches to business. Why, for instance, don't the CBI and the TUC exchange assistant secretaries to further the cause of better understanding? Surely one of the more intractable difficulties besetting contemporary Britain is the virtual separation of elites—yes, I mean elites—from each other. As a result, too many of the ablest in their occupational lives in self-imposed ghettos. The Americans have been seconding their promising officials and executives for a period of two or three years to work in industry, universities, institutions, or government. Would it be right to assume this practice to be one of the reasons why human relations in American business life are less divisive?

Nicholas A. H. Stacey.
Reform Club,
Pall Mall, S.W.1.

If inflation was reduced

From Mr. M. Williams
Sir—Samuel Brittan rightly emphasises (January 17) the need to index-link Government debt. Like him I am inclined to suspect that failure to do so could make reduction in the rate of inflation prohibitively expensive for even the strongest-minded Government.

There is a more general reason for indexing Government debt (and, indeed, other contracts) which has received rather less publicity. This is that unindexed debt causes policy choice over the intensity of counter-inflationary policies to have massive distributional consequences. The politically destabilising impact of this is, fortunately, hidden partly since very few people (other than those whose sole source of revenue is an income fixed in nominal terms) are aware exactly how their mortgage, pension rights, property, mortgage debt, likely future tax liabilities etc. is affected by inflation and so are inclined to accept the conventional wisdom that low inflation is "good" and high inflation "bad." I wonder, however, to what extent this veil of ignorance would be penetrated once a Government started to reduce inflation and what consequences would be.

One group aware of the massive benefits that would accrue to clients from successful counter-inflationary policies are the "tenage scribblers" who work for brokers in the gilt market. They are thus likely to promote deflationary policies almost regardless of the damage to the other parts of the economy that might follow. I am not surprised that these analysts write what they do

write: they have obvious interests in doing so. I am rather more surprised that what they say is treated by the media as if it came from disinterested sources.

M. C. Williams.
104a Ashley Gardens,
Thirley Road, SW1.

Indexed bonds

From Professor P. Minford
Sir—Samuel Brittan has suggested (January 14 and 17) a payroll regulator and a conversion of government stock into indexed bonds.

The small, self-financing regulator fund would certainly be better than the discretionary "stabilisation" policy which we experienced in recent years, since it would increase the predictability of policy. The trouble is that, being small, the fund will not "stabilise" much, and so may not be worth the administrative trouble. Yet, if it is large, it risks destabilising the economy, as Mr. Brittan points out. He also admits that in our present situation the primary aim must be to reinforce the long-term programme of reducing the public sector borrowing requirement, and money supply growth; a fund set up now would just be seen as a backdoor way of undermining this. In the longer term such proposals need to be carefully considered in the design of a predictable fiscal system.

The indexed bond proposal has raised exaggerated hopes in some circles that it would somehow eliminate the public sector financing problem. This is absolutely not the case, as Mr. Brittan rightly implies when he says that it would not make tax cuts any easier. If all bonds were indexed, then the Government would have to pay real interest rates sufficiently high

to induce the private sector to lend it the real resources ("the real PSBR") it required. In the present situation it pays nominal interest rates high enough for the same object: these nominal interest rates compensate for expected inflation. The only difference is that unanticipated inflation would not affect the real interest actually paid over.

Similarly, financial constraints on the nominal PSBR would be unchanged. Through nominal PSBR the authorities control the growth of the private sector's overall portfolio in money terms. This is the major determinant of growth in money supply. It is these nominal constraints that regulate the rate of inflation, regardless of whether bonds are indexed or not. If the authorities truly intend inflation-reducing policies, then to issue long-term debt at interest rates which assume they will not succeed will raise the future debt service burden. Issuing indexed bonds avoids this, the essence of the benefit lying in the difference between the authorities' and the market's discount rates and information. Such a difference, however, would be better eliminated by Government openly declaring its intentions—a process that Ministers have begun but not yet completed.

A more substantial argument for indexed bonds is that, if investors prefer indexed to existing bonds, at an equivalent expected real cost, then it will pay governments to issue them, at a premium over other bonds. That this preference exists is not clear from the experience of private indexed bonds. But experimental issues would test preferences for government indexed bonds. Any further progress towards the full Brittan Conversion would then be determined by market choices.

Patrick Minford,
University of Liverpool,
Eleanor Rathbone Building,
PO Box 147, Liverpool.

Scale of gas charges

From Mr. C. Carter
Sir—Both the Home Secretary and the Energy Secretary are reported to have said that the Government is considering means of assisting the poor to meet the increased cost of gas when the price is increased later this year.

Would it be impossible to do this through a scale of charges? Gas prices tend to encourage consumption but the industry seems to be in a situation where it needs to discourage consumption. Does not this make it possible to introduce a scale of charges resembling somewhat the income tax scale—a very low rate for the first few tens of therms in a quarter, an intermediate, higher rate for the next few hundreds of therms and a higher rate still for consumption above, say 500 therms in a quarter?

C. J. Carter,
7, Turner's Wood Drive,
London Road,
Chalfont St. Giles, Bucks.

lishes the purported measurement of the return on resources. Could he be persuaded equally eloquently to demolish the measurement of the resources to be returned on. Everybody surely knows, whether it is politic to admit it or not, that declarations of the resources applied to produce a given return are normally so elusive as hardly to be even a confidence trick.

The meaningful comparison for assessing management performance, as Mr. Rayman might be read to imply, is between two flows: the flow of returns, in the recent past, the present and the foreseeable future, and the flow, over a rather longer period, of new commitments of resources (which can also be negative). Both profiles are likely to be erratic and difficult to compare arithmetically, but some form of convergence or divergence may be recognisable. If there isn't any significant flow of new commitments, then all that can be compared is the current flow of returns with a past flow or somebody else's flow.

P. Gray-Lucas,
The Hatfield Polytechnic Centre for Management Studies,
330, London Road, St. Albans.

The impact of energy

From the Director,
Council for the Protection of Rural England

Sir—The nuclear industry—in the person of Peter Vey, the UK Atomic Energy Authority's head of information services (January 15)—does itself little credit in implying that the world can be divided exclusively into bodies who are "pro" and bodies who are "anti" nuclear power. We reject such facile categories.

Council for the Protection of Rural England is one of those bodies whose interests stand to be damaged drastically by policies of rapid expansion of the existing domestic energy supply industries—be they nuclear, coal, gas or any other. Our approach to energy development has always reflected anxiety about this—which is why we have pressed repeatedly for far stronger measures on energy conservation (to reduce overall demand) and on the use of primary energy demands than Government has shown itself willing to propose.

We shall continue to draw attention to major public concerns—for public rights within the planning process as much as for the rural environment itself—arising from the present official insistence on energy supply by means of ever-larger and more intrusive technologies. We do so in respect for instance of coal-mines as much as nuclear power stations.

As to the latter, Mr. Vey himself points to the extraordinary wide range of issues raised by this technology. As an independent organisation, CPRE has always welcomed public discussion of the matters he mentions, such as nuclear power's implications for democratic procedures, freedom of information and civil liberties. Any small additions to such debate which we have made have always been wholly consistent with our aims and objects. It is silly of Mr. Vey to imply otherwise.

Christopher Hall,
4, Robert Place, SW1

Today's Events

GENERAL
UK: Mr. John Biffen, Chief Secretary to the Treasury, addresses political committee lunch, Carlton Club.

Mr. Cecil Parkinson, Trade Minister, meets Birmingham Chamber of Commerce to discuss exports.

Mr. Peter Rees, Treasury Minister, speaks at Surbiton. TUC Labour Party liaison committee meets.

First meeting of management union working party at Meccano, Liverpool, to find new buyer for the plant.

Microsystems '80 Exhibition and Conference opens, Wembley Conference Centre.

Overseas: Philippines' first local elections for nine years.

PARLIAMENTARY BUSINESS
House of Commons: National Heritage Bill. Motions on Provisions of Milk and Meals (Amend.) (No. 2) Regs. and Milk and Meals (Education) (Scotland) Regs.

House of Lords: Debate on price increases for gas and electricity. Short debate on policy to abolish restrictive practices in distribution and sale of reading lenses and spectacle frames.

Select Committees: Foreign

Affairs. Subject: FCO organisation. Witnesses: Foreign Office.

Room 15, 10.30 am. Industry and Trade. Witnesses: Sir William Barlow, chairman of Post Office. Room 16, 10.45 am. Public accounts. Subject: Stockpiling procedures at MOD depots. Witnesses: Ministry of Defence. Room 16, 4 pm. Energy. Subject: New nuclear power programme. Witnesses: David Howell, Energy Sec. Room 8, 4.30 pm. Social Services. Subject: Perinatal and neonatal mortality. Witnesses: Medical Research Council, Prof.

K. Cross, Prof. E. Symonds. Room 6, 4.30 pm.

COMPANY MEETINGS

M. J. Gleeson, Harewood House, London Road, North Cheam, Surrey, 12. Redman Heenan, Connaught Rooms, Great Queen Street, W.C. 12. Reliable Properties, Winchester House, Old Broad Street, EC 1. 12. COMPANY RESULTS

Final dividends: Allied Textile Companies. Bank Leumi (UK). F. Pratt. The Throgmorton Trust. Interim dividends: Associated Dairies Group. B.A.T. Industries. Dargan Holdings. Manson Finance Trust. Stewart Plastics. Syltore.

International bidding: Two sugar-beet plants (Chile).

Industria Azucarera Nacional S.A. IANSA (National Sugar Industry) announces to investors that it has put up for international bidding two sugar beet plants located in the southern part of the country. The first one is in Linares - 315 kilometers south of Santiago, i.e., 7th region. The second one is in Los Angeles, 8th region, 509 kilometers south of Santiago.

Natural or legal persons—either Chilean or foreign may participate according to the specifications.

BIDDING CONDITIONS AND COMPLETE INFORMATION

Bidding conditions and the annexed inventories with the description of the assets to be sold, technical records and a complete feasibility study of Linares and Los Angeles plants recently prepared by an expert advisory bureau, are at the disposal of interested parties.

Bidding conditions cost US\$ 200—in national currency—for each plant, and may be withdrawn beginning January 21 st, 1980 at the following addresses:

England: Charge D'Affaires, 12 Devonshire Street London W1N 2 - DS.
France: Chilean Embassy, 2 Av. de la Motte Picquet 75007, Paris.
Germany: Chilean Embassy, Kronprinzstr. 20, 53 Bonn - BAD, Godesberg.
Spain: Chilean Embassy, Serrano 14, Madrid.
Switzerland: Bureau D'Affaires Financieres (Chili), 50 Rue de Moillebeau, Geneva 19.
United States: Corfo, One World Trade Center, Suite 5151, New York.

Date for offer presenting: April 2nd, 1980.
Date for bidding adjudging: 30 days since the offer presenting.
Date for plants delivery: before July 15th, 1980.

ASSETS TO BE BIDDED

- Lands and factory facilities, warehouses and offices including the whole Linares and Los Angeles plants. The Los Angeles plant includes an alcohol distillery.
- All the machinery, vehicles, tools, inputs, etc. existing in Linares and Los Angeles plants according to the inventories annexed to the bidding conditions.
- Bidding also includes the transfer of the dwelling houses placed at the plant lands.

Note: Plants are bidden separately.

REMARKS

Any remarks interested parties may pose or for further information please contact the above mentioned offices.



iansa-Chile

Reed Intl. up to £80m at nine month stage

AFTER reduced interest charges, profits before tax of Reed International for the third quarter of 1979-80 increased from £23m to £29.9m giving a total for the nine months ended December 31, 1979, of £80m compared with £53.1m in the same period last year.

Operating profit in the third quarter of £32.5m (£30.7m) comprises a maintained contribution of £22.5m (£22.6m) from the UK and an improvement to £10.3m (£8.1m) from overseas.

	Nine months 1979	1978
Sales	1,112.1	1,228.9
UK and Overseas	819.7	717.6
Operating profit	33.8	37.1
UK	28.9	26.5
Overseas	4.9	10.6
Profit before tax	30.0	32.5
UK	20.9	19.3
Overseas	9.1	13.2
Net profit	24.4	24.4
UK	19.9	19.9
Overseas	4.5	4.5
Attributable	20.0	20.0

Stated earnings per share for

HIGHLIGHTS

The Lex column looks at a new survey that highlights the growing debate over the future structure of the stock market in the light of the reference to the coming action against the Stock Exchange in the restrictive practices court. In Germany Hoechst has made a rights issue and raised its dividend. Meanwhile good third-quarter figures have been released by Reed International. On the inside pages figures from Trident TV show the impact of the technicians' strike and lower profits are also reported by Prestige, Henderson-Kent and Roskill. But IDC and Christie-Tyler managed to show higher profits. There is also news of a new water issue due to be published tomorrow.

The nine months are 45.1p (35p) following 15.9p (9.4p) at the end of the third quarter. For the year ended March 31, 1979, earnings per share were 35p when pre-tax profits were £83.4m (£81m).

In 1979, the overseas results are consolidated on a cost-of-sales basis for the nine months to December 31, 1979. In the comparative figures for the previous

year, results were for the nine months to September 30, 1978. Overseas results for January to March, 1979, are not reported at present but will be included with the results for 1979-80. Sales to March last year totalled £84m and attributable profit was £4m.

SSAP15 has been adopted and 1978 figures have been restated. See Lex

Prestige down after strikes

The engineering dispute and exchange losses affected the Prestige Group during the second half of 1979 and pre-tax profits at the year-end were down from £6.85m to £5.88m despite a sales rise from £59.52m to £62.25m.

First half profits were down from £2.72m to £2.42m, both sales and profit having been affected by the transport strike and industrial action at three factories in Lancashire during March.

Stated earnings per share for the year are 18.92p against 20.82p but a final of 4.375p is recommended lifting the total from 6.250p to 6.875p.

Exchange losses amounted to £308,689 compared with a £129,708 surplus in 1978. The consolidated balance sheet at December 31, 1979, continued to show a strong position, although cash and short-term deposits (net of foreign bank loans and overdrafts) showed a reduction to £2.76m (£3.52m). This decrease in liquidity reflects the repayment of foreign currency loans of £1.2m.

Fixed assets at cost, less depreciation, amounted to £9.5m. Expenditure on fixed assets during the year amounted to £1.87m (£2.01m). Current assets totalled £27.14m, of which stock amounted to £13.6m (£11.9m) and debtors to £10.55m (£9.54m).

During 1979 the outstanding 26,690 preference shares were redeemed at 105p per share, in accordance with the terms of the issue.

The group which is one of the major houseware manufacturers in the world, outside the U.S., is controlled by American Home Products Corp.

	1979	1978
External sales	62,250,044	59,515,286
Trading profit	5,944,228	7,264,355
Deposits income	278,263	382,115
Interest payable	486,523	467,951
Profit before tax	5,880,968	7,264,355
Corporate taxation	2,428,639	3,046,680
Net profit	3,452,329	4,217,675
To capital reserves	25,024	—
Prof. dividends	467	534
Leaving	3,451,862	4,217,141
Available for end.	3,709,623	3,689,961
Ord. dividends	1,247,100	1,130,433
Forward	2,462,523	2,559,528

After the multiplicity of strikes last year, both internal and national, there were very few

Birmingham & Midland to make offer for Wardle

Birmingham and Midland Counties Trust, controlled by Mr. Graham Ferguson Lacey, intends to make a 33p share cash bid for Bernard Wardle, the vinyl fabric and motor component company of which it already owns a fraction under 30 per cent.

The terms value Wardle at nearly £6m, but Mr. Ferguson Lacey wants to keep his eventual stake at 50 per cent or so and maintain its Stock Exchange listing. Depending on the level of acceptances, therefore, Birmingham and Midland will arrange for the market placing of any shares it does not wish to keep.

Wardle's share price moved up 54p yesterday to close at 34p on news of the offer. No immediate comment was available from the company's board, which has still to consult its advisers, S. G. Warburg.

Birmingham and Midland began accumulating shares in Wardle in November, 1978, when it bought 10 per cent. It added to this in subsequent months, acquiring 27 per cent by July of last year at an average price of 21p.

The holding moved up to 29.9 per cent last October. Under the Takeover Code, this is the maximum stake a company may own without making a full bid. When making his first purchase, Mr. Ferguson Lacey said he did not plan to go over 25 per cent.

Arbuthnot Latham will be making the offer on behalf of

Second half fall leaves Trident TV at £7.5m

A SECOND half fall from £4.23m to £2.68m has left Trident Television with taxable profits of £1.51m behind at £7.51m for the year ended September 30, 1979, on turnover down slightly from £65.38m to £64.46m.

Profits were struck after Exchequer levy of £7.72m against £11.55m.

Mr. Ward Thomas, the chairman, says it has been a most difficult year, culminating in the national stoppage which lasted 11 weeks.

Advertising has been strong since the strike last year—the stoppage caused a loss of £13m in advertising revenue and £700,000 of uncompleted programme expenditure—and by the 1979-80 half-year stage Trident will "probably be close to achieving its original revenue budget," he states.

Stringent controls are necessary to keep down ever increasing costs while producing top quality programmes and, provided these costs are controlled, Mr. Thomas states that results for the current year will "show a marked improvement."

	1979-79	1977-78
Turnover	64,460	65,380
Profit before tax	7,514	8,076
TV contracting	5,172	7,091
Other operations	2,341	1,985
Profit	4,228	4,648
Exchequer levy	7,720	7,720
After Exchequer levy	7,720	7,720
£11.55m	£11.55m	£11.55m

The IBA having invited applications for contracts to run from January 1, 1982, the company will lodge its re-applications for the Yorkshire and Tyne Tees regions, "with absolute confidence."

Earnings per 10p share are shown as 5.7p (10.8p) and a dividend total of 3.475p (3.155p) net with a final payment of 2.33p. Net assets are given as 50.9p (46.8p).

The company's development in the U.S. moved forward with the formation of Trident Television Associates for the acquisition and distribution of film programmes to U.S. television stations, and throughout the world. The company should move into profit in 1981, the chairman says.

Wants and Corry continued its station work as it did the Leisure Park group, and Scarborough exceeded its profit target despite poor summer weather.

Mr. Thomas says a new broadcasting Bill, which will be presented to Parliament shortly, is expected to include a provision for a further television channel, to be administered by the IBA.

"It seems possible that the programme companies will have to provide all the finance and many of the programmes, but have little say in the way it operates," however, judged must be withheld until the Bill has been presented and debated by Parliament," he states.

comment

The technician's strike clipped around £2m off Trident's contracting profits. No surprise in that, and after the £1m slide in full year profitability, all eyes are on the anticipated recovery in 1980. After the strike, advertising revenue was particularly buoyant as the clamour to buy virtually did away with the usual discounts, and even now advertising remains surprisingly strong with Trident about to implement a 25 per cent cost rate

card increase. Non-contracting operations provided a useful increase, largely thanks to a jump in interest receivable, though the actual cash position deteriorated to around £7m at the year end as Trident invested £1.5m in the property since disposed of at a profit. Problems at Wicken Safari Park at last seem to have been sorted out and that operation is about to be sold. Its face though better things are promised in 1980. Overall, this year should see profits top £5m but it is obviously going to be a year of agony for the contractors as applications for the IBA franchises come up. The renewal of the network, which panics are widely expected to hold onto their franchises but there will no doubt be cut-throat in the market. At 53p the yield of 9.8 per cent and p/e of 7.3 (excluding exceptional) is fair enough.

Loss by Five Oaks Invest.

LOSSES OF £73,997 have been incurred by Five Oaks Investments, property and housebuilding company, for 1979 against a £247 profit in the previous year. Turnover was lower at £494,333 against £520,855.

It takes £52,090 (£6,069 credit) and loss per share is 3.22p compared with 0.04p previously. Extraordinary debits total £11,440 (£38,458 credit). The company's preference dividend payments have been in arrears since 1966.

Westland warns of further lost orders following AOI collapse

Of total turnover on helicopters of £144m, some £43m was in respect of contracts for which provisions had been made and which therefore contributed no profit. The profit of £9m on helicopter work was below expectations because of delays in delivery and productivity shortfalls. No profit was taken on work done under the contract with Arab British Helicopters.

No further provisions are considered necessary for the first Ministry of Defence Lynx contract. This contract will be completed in March, and the directors hope to be in a position by this time next year, after a thorough review, to bring back something out of the heavy provisions made in earlier years.

No profit was taken on the delivery of the second Super 4 helicopter, which was covered by substantial provisions made in the previous year. The warranty on this expires in May and the chairman says the group will then know for certain the total costs of completing this expensive contract and it is then expected to bring back over £500,000 from provisions made.

The second Super 4 was delivered on time in early May and Lord Aldington says both performed excellently throughout the rest of the year. The

directors estimate that the Super 4s have substantial advantages over the previous uncontracted SRN 4 Mk 2. Work is proceeding to plan on the new orders for SRN 4s secured early in the year from two Middle East countries.

During the year, Westland had successes in the helicopter market. New orders were received from the Royal Navy and the Federal German Navy and negotiations are at an advanced stage with two overseas customers. In addition, spare orders were good.

Work on developing the WG 30, a transport version of the Lynx, has continued on course and this had received interest from many parts of the world. The next stage in the Sea King replacement project is to cement relationships with the group's Italian partner, the Agusta Company, and to secure a United management effort, the chairman adds.

Group expenditure in 1978-79 on research and development was over £2m, more than £7m higher than last year. Of this, £2.2m was funded by research contracts, £1m was recovered on other contracts and £3.7m was written off as private venture expenditure, more than half of which was related to the WG 30. Meeting, Hyde Park Hotel, SW, February 21, noon.

He adds that the group, with Government support, is discussing the considerable problem of the future, including compensation, with its former partners.

As reported January 10, pre-tax profits for the year ended September 30, 1979, were £15.27m, after debiting £750,000 on an out of court settlement following the Vickers law suit. Previously, a deficit of £2.86m was incurred, but this was after providing £16.16m for losses and loss provisions on Lynxes and Super 4 hovercraft. The dividend is boosted from 1p to 4p net per share.

The chairman expresses hope that in the course of the year, if not the whole of the originally projected order plan for 250 Lynx helicopters will be restored.

Abbey Life Assurance Company reports another successful year for its Abbey Property Fund for the period ending October 22, 1979.

The fund rose by £81m over the period to £365m, and the unit price improved by 20.7 per cent. Income from property holdings improved from £12.4m to £15.5m and interest on short term deposits nearly doubled to £8.5m (£3.9m). Total distributable income was nearly 50 per cent higher at £11.35m, against £7.8m.

At the end of the year, just over half the property portfolio was held in offices, with a quarter in industrial, 16 per cent in shops and 8 per cent in agricultural.

The fund, the largest of its kind, acquired some 17 new properties during the year involving a total commitment of £17.6m. In addition, terms have been agreed for the purchase of a further six properties involving a commitment of £3.6m.

The fund managers also took advantage of the strong investment market to dispose of 16 properties, which was felt that future performance would likely be limited, or would alter the balance of the portfolio. This raised £9.6m, some £3.5m in excess of the aggregate book value.

The fund is well placed to take advantage of special investment opportunities which may arise, particularly if yield rates go drift upwards in certain property sectors.

The liquidity of the fund rose during the year, and amounted to 14.7 per cent of the fund value at the end of the period.

The fund managers pointed out that the fund's portfolio of commercial, industrial, and agricultural properties exceeded the supply and that investment yields were close to historically low levels.

They believed that it was correct to adopt a cautious policy in view of the generally uncertain economic future. The fund is well placed to take advantage of special investment opportunities which may arise, particularly if yield rates go drift upwards in certain property sectors.

IDC boosted by tax write-back: pays 11.5p and proposes scrip

INCLUDING a substantial write-back of stock relief, net profits of IDC Group, industrial and commercial building constructor, jumped from £564,749 to £3.38m in the year to October 31, 1979.

The dividend is lifted from 10p to 11.5p net with a final of 8.75p, and the directors are proposing a three-for-two scrip issue.

A transfer of over £2.8m has been made to the profit and loss account in line with Finance Act 1979 provisions which determined that tax on stock relief received in 1978 and 1979 would not become payable.

The current year has started well, state the directors, with an excellent order book and a high level of serious enquiries and, should the economy strengthen, the group will be able to take full advantage. They point out, though, that high interest rates and labour unrest, coupled with events in the Middle East, make the future difficult to forecast.

Turnover rose from £35.58m to £44.45m in the year, and the surplus includes a net tax credit of £2.11m (£559,705 charge).

Earnings per 20p share are shown as 150.4p (155.4p) or, fully diluted, 124.3p (120.9p). Excluding the written-back stock relief, earnings are 23.7p or, diluted, 18.6p.

comment

IDC has suddenly pulled some carefully concealed plums out of the bag. Clawback provisions on past stock relief lift the unappropriated surplus from the 1978 level of £425,000 to £3.2m and an asset revaluation of which around a third relates to investment properties—produces a £2.9m transfer to capital

Expansion for Atlantic Computer

With turnover showing a substantial increase from £11.48m to £16.94m, Atlantic Computer Holdings reports net profits moving ahead from £1.05m to £1.18m during 1979.

Mr. V. J. E. Davies, the chairman, says the increased turnover was due primarily to higher sales of second-user 270 systems, and profits rose despite strong competition in an active market and exceptional costs arising out of new office facilities.

The company had a backlog of orders for over £4m at December 31, 1979, and the forecast for 1980 is one of further expansion.

DIVIDENDS ANNOUNCED

	Current payment	Date of payment	Corr. Total of dividend	Total last year
Christie-Tyler	1.3	Apr. 6	1.8	6.5
Glass Glover	1.43	Apr. 1	1.11	1.85
Henderson-Kent	1.25	—	1	3
IDC Group	8.75	—	7.6	11.5
Prestige	4.38	Apr. 8	3.74	6.88
Roskill	0.75	—	0.75	2.31
Thurgerton Ltd	3.3	Mar. 26	2.88	5.55
Trident TV	2.35	Apr. 3	2.23	3.48
Vantage Securities	0.65	Mar. 26	0.45	0.85
A. J. Worthington	0.41	Mar. 31	0.34	0.89

Dividends shown pence per share net except where otherwise stated. * Equivalent after allowing for scrip issue. † On capital increased by rights and/or acquisition issues. ‡ To reduce disparity.

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HAMBRO PROVIDENT RESIGNS FROM LOA			
Hambro Provident Assurance has announced its resignation, as from last Monday, from The Life Office's Association of London Assurance Companies (LOA).			
The company now resigns all its business with its parent company Hambro Life Assurance, which is also a member of the LOA.			
In these circumstances it was felt that separate membership was no longer appropriate. Hambro Provident will continue to adhere to the LOA premium-related commissions structure for commissions paid in intermediaries.			
The company is a leader in the home income plan market.			

M. J. H. Nighthale & Co. Limited					
27/28 Lower Lane London EC3R 9EB Telephone: 01-621 1917					
1978-80	High Low	Company	Price	Gross Yield	P/E
39	72	Airbrum Ord	70	6.7	9.2
50	38	Amroga and Rhoda	38	3.8	9.7
227	185	Barton Ltd	200	12.8	6.1
100	88	CCC 10.7% Pref	87	10.0	17.8
101	83	Deborah Ord	80	—	10.0
33	140	Deborah-17.5% CULS	140	17.5	5.0
56	88	Frank Hovell	85	—	—
123	100	Frederick Parker	94	7.8	8.4
128	106	George Blair	106	12.8	11.9
158	105	Georgina Ltd	105	15.8	6.8
153	115	James Burroughs	115	—	—
300	242	Robert Jenkins	250	7.2	6.3
232	175	Torday Limited	223	14.3	6.2
34	70	Twinkl Ord	70	—	—
58	23	Unilock Holdings	23	12.0	15.8
84	42	Walter Alexander	42	4.4	4.1
180	138	W. Yates	138	11.5	5.2

Henderson-Kenton down to £437,000 at midway

A DOWNTURN in taxable profits from £607,000 to £437,000 is reported by Henderson-Kenton, the retail furniture group, for the six months to September 30, 1979, on increased turnover of £12.3m against £12.1m.

The directors state that although full year results will not match the 1978-79 record of £2.07m, they remain confident that the company's performance will do it credit in the present adverse conditions.

Group margins are back on course after a policy decision to extend to customers the benefits of placing orders at the pre-increase rate of VAT.

January sales are excellent, but the directors say it is not yet possible to forecast the volume of trade for the remainder of the year.

Half-yearly earnings per 20p share are stated lower at 3.1p (3.7p), while to reduce disparity the interim dividend is raised from 1p to 1.25p net. Last year's final was 2p, and the directors say that the 1979-80 payment will be determined in the light of the year-end results.

Tax for the six months took £175,000 (£200,000) giving net profits down from £207,000 to £232,000. Preference and ordinary dividends absorbed £64,000 (£77,000) and £80,000 (£84,000) respectively.

The group recently commenced trading in Birmingham, Ashington and Milton Keynes while additional outlets have been acquired

BOARD MEETINGS

The following companies have notified the Board of Directors of the Stock Exchange. Such meetings are usually held for the purpose of considering the accounts. Official indications are not available as to whether dividends are to be paid or not, and the sub-divisions shown below are based mainly on last year's dividends.

TODAY

Interim—Associated Dairies, S.A.T. Industries, Dairies Holdings, Mission Finance, Summit Plastics, Sytton.

Final—Allied Textile, Bank Leumi (UK), F. Frost Engineering, Throgmorton Trust.

FUTURE DATES

Interim—Ashley Industrial TrustFeb. 4
Warren PlantationsJan. 31
FrostFeb. 20
Carrington ViellasJan. 31
Ruo EstatesJan. 31

Amended.

optimism expressed at the annual meeting, the judgment looks a trifle harsh given that margins have improved and the company, which is expanding its retail outlets, has a sound balance sheet. Clearly, though, the market is not expecting the current second half recovery to be more than a short-term phenomenon. For the year profits may be no more than £1.5m, a downturn of 23 per cent, which suggests a fully-taxed p/e of 9.5 and, if the dividend is raised a tenth, a yield of 4.8 per cent.

Rosgill profit margins fall

A REDUCTION in profit margins at Rosgill Holdings meant that although the clothing distribution group increased turnover by 25 per cent from £12.21m to £15.3m for the 26 weeks to December 8, 1979, pre-tax profits were down by £237,000 to £433,000.

The introduction of the higher VAT rate had an adverse effect on sales and the increase achieved was at the expense of profit margins as trading conditions generally worsened.

Turnover for the year is expected to be ahead of the previous year's £22.57m, but the directors do not anticipate any improvement in margins.

For the year ended May 26, 1979, taxable profits jumped from £315,000 to £1.13m.

The company is in dispute with the Commissioners of Customs and Excise over the valuation, for VAT purposes, of garments provided to party hostesses.

Rosgill's appeal was upheld by the VAT tribunal, but the Commissioners intend to appeal against this decision. Pending judgment, provision for the full amount of £37,000 has been made in the accounts.

The interim dividend is held at 0.75p net per 5p share—the total last net was 2.31p.

Grimshawe 13% higher at halfway

PRE-TAX profits of Grimshawe Holdings increased 13.6 per cent from £104,340 to £118,588 in the six months to October 31, 1979. Turnover of this industrial group with strong interests in the DIY market and protective surface coatings, was 49 per cent higher at £2.83m against £1.97m.

Mr. Thomas Kenny, the chairman, says in his report that the group continues to progress, but the figures for the first half are not strictly comparable to those of the previous year. He points out that the acquisition of Aspek was completed in August, 1978 and its results are only included in the group figures from that date. The absence of rental income and the reduction of interest costs (from £61,347 to £33,496) reflect the revised arrangements with the Midland Bank.

No tax is deducted as there are still substantial tax losses available to set against future profits.

Mr. Kenny recalls that at an extraordinary general meeting on January 23, 1980, shareholders approved the acquisition of Cindy for an issue of 777,338 ordinary shares. The share capital is thus increased by £155,507 and the share premium account by £294,493.

Cindy's pre-tax profits for the nine months to September 30, 1979 were £28,000. No amount for Cindy is included in Grimshawe's half-year figures.

Brooke Tool optimistic of further improvement

STRIKING A confident keynote in his annual statement, Mr. D. M. Saunders, chairman of Brooke Tool Engineering (Holdings), says increases in output budgeted by subsidiaries for the current year can be achieved despite worsening economic conditions. This confidence is witnessed by the £12.5m spent last year on acquisitions and the internal capital expenditure programme, and the £0.5m earmarked to upgrade and replace plant and machinery in the coming year.

AS reported on January 16, pre-tax profits for the year to September 30, 1979 improved from £328,000 to £495,000 on turnover ahead from £5.7m to £6.4m. Mr. Saunders describes the improvement of trading margins from 7.3 per cent to 8.7 per cent of adjusted sales as "the most encouraging figure highlighted by the accounts."

During the year the group expanded its specialist cutting tool interest by the acquisition of Mansel Brothers Tools and Strong's British Precision Tools. Also, in July, certain assets of Broadbent Machine Tools were acquired, thus increasing the group's interests in the manufacture of machine tools for highly specialised applications. Broadbent manufactures hollow spindle lathes used by the off-

shore oil industry for equipment servicing.

In May a fire destroyed the main machine shop and assembly areas at the Boxford Machine Tools subsidiary. All plant and buildings were insured on a reinstatement basis, and consequently the group was able to re-equip Boxford with all the necessary facilities. However, in order to provide additional capacity for further expansion of the company, the directors have recently authorised the building of a larger production area than existed before the fire. This will cost some £300,000 more than the proceeds of the insurance claim.

Full insurance cover was in force to cover the costs incurred and compensation lost as a result of the fire. The effects of the fire during the five months from May have been assessed, and an appropriate amount has been credited to the profit and loss account.

The insured value of plant lost showed a surplus over book value of £596,000 and this has been treated as an extraordinary credit. No adjustment has been made in respect of land and buildings, as the programme of reconstruction is not yet completed. The directors intend to revalue the new premises during 1980 and to reflect the result of that valuation in next year's accounts.

The chairman reports that in recent months the Fred Whiteley subsidiary has been winning orders from new customers as well as increasing the amount of business scheduled from existing customers. With further improvements in efficiency, the company should show a considerable increase in profits during the current year, he states.

Following the acquisition of Strong's British Precision Tools, its manufacturing activities have been amalgamated with those of Beaver Tools. The combined companies are now in a strong position to improve profits considerably during the next 12 months.

As a result of the losses previously incurred by the group, coupled with the effect of the re-equipment programme, there are substantial tax losses available to set against future profits. It is unlikely that any liability, other than ACT associated with dividends, will be payable for some years.

At January 1, 1980 Charter Corporation held 71.48 per cent of the company, ITC Pension Trust 12.02 per cent, NCB Pension Fund 10.52 per cent, and Prudential Assurance Company 7.14 per cent.

The AGM will be held at the Great Eastern Hotel, EC, on February 21 at 2.30 pm.

Christie-Tyler improves midway but expects full-year downturn

IN LINE with the directors' expectations, pre-tax profits of Christie-Tyler, furniture and upholstery maker, were a little better in the six months to October 31, 1979, rising £90,000 to £1.62m.

But they now forecast that results for the full 12 months will be well below those of last year, when taxable profits rose from £1.82m to £4.22m.

Trading conditions since the increase in VAT have been difficult, they state, and the autumn, which normally shows a marked upturn in sales, was quieter than anticipated.

In the longer term, however, the group is in a strong position to take quick advantage of any improvement in the market, they conclude.

Turnover for the six months rose from £29.74m to £34.96m, and tax takes £537,000 (£594,000). Earnings per 10p share are up from a stated 7.6p to 8p.

The interim dividend is increased from 1.5p to 2p—last year's final was 4.7p.

strength of the bearish statement. C.T. has a shorter order book than most other furniture manufacturing companies and this means that movements in demand—in this case a downturn—show up very quickly. In addition, the company is operating at the cheaper end of the market. Given the experience of the retailers during the autumn, when demand was sluggish following the VAT increase, only about £3m pre-tax looks possible for the year—a downturn of almost 30 per cent. At this level the shares sell on a fully-taxed p/e of just 4.4 while the yield, assuming a 10 per cent increase, is an attractive 15.4 per cent.

Metromed, Cardross Properties, Towncastle, G. and E. Gowns, Representation, Artists Direction and Personal Management.

Illustra Craft, Navarra, Coopers (Overalls), Vobbia, Stuart Darling and Co., H. T. Travel, Glass Developments, Aravey Shipping Co. S.A., Glasgow.

Rolus Properties, The Tetrach Property Company, Loderford Properties, Gilford Motors, Shoalscourt Estates, Stat Preset Tooling, Vienna (Joiners), Bon-textile Installations (Engineering).

Prentiss Joinery, Colman, Kendris and Varley (Holdings), Embassy Enterprises (Tombola), Edmille, Glosswind Builders, Stowhead Industrial Cleaners.

Intercommerce (UK), A.I. (Central Heating), V. J. Spiller (Barbers, Signage) and Brooks For Brick.

A compulsory winding up order made on January 21 against A.C.T. Commercial was dismissed by consent. A similar order made against Wireonics was struck out. In both cases the petition debts had been paid.

A compulsory order against Cobra Supafarm has been rescinded.

Porvair's 13-month setback

NET PROFIT of Porvair, manufacturer of microporous synthetic materials, plunged by over 60 per cent to £130,000 in the 13 months to November 30, 1979. The previous accounting period was one of 10 months when net profits were £465,000.

Turnover for 13 months was £8.3m against £4.8m. There is no tax charge and stated earnings per 25p share are shown as 1p against 2.6p. No dividends have yet been paid. Porvair is a subsidiary of Immont (UK), the ultimate holding company being Carrier Corporation of the U.S.

—28 weeks—

	1979-80	1978-79
Turnover	15,239	12,229
Trading profit	528	738
Interest charges	45	19
Profit before tax	483	720
Tax	31	124
Profit	452	596
Dividend	72	72
Retained	380	524

Glass Glover makes over £0.5m

AS forecast, profits of Glass Glover Group, food concern, have exceeded £500,000 for the first time.

For the year ended September 30, 1979, the taxable surplus exceeded from £450,740 to £532,481, on turnover up from £24.73m to £30.43m.

And in the light of current trading the directors are confident that first half profits for 1979-80 will at least equal the £172.3 (£132.70) for last year.

Earnings per 5p share are shown as 4.85p (3.813p) and the dividend for the year is increased to 1.85p (1.371p) net with a final of 1.4335p.

1978-79 1977-78

Turnover	30,430,377	24,731,643
Trading profit	532,500	472,416
Less: depreciation	1,000	1,000
Interest	6,038	8,324
Profit before tax	525,462	463,112
Tax	285,881	266,252
Net profit	239,581	196,860
Property surplus	746,270	—
To reserves	746,270	—
Dividends	104,000	77,172
Retained	142,454	117,316

Less interest on deposits.

There was a surplus of £746,270 arising from a property revaluation, which has been transferred

to capital reserves.

The directors say the group is investing in additional warehousing and pre-packaging facilities in Scotland and in Kent, to cope with the demands of the continuing increase in its volume of trading.

The company remains very liquid, they add, only needing recourse to its substantial bank borrowing facilities at peak trading times in the summer months.

Utd. Guarantee to broaden base

The directors of United Guarantee (Holdings) intend to broaden the group's trading base through diversification, and the chairman, Mr. E. W. King, says in his annual report that steps are being taken to strengthen and expand the management team, which has been particularly overstretched in the past year.

As reported on January 22, pre-tax profits of the lubricants and fuel oil group advanced from £315,780 to £389,810 in the year to September 30, 1979, on turnover of £8.07m (£4.14m). The improved turnover is attributed to the purchase of West End Oil,

now United Fuel Oils.

At the balance sheet date, there were current assets of £1.91m (£1.18m) and current liabilities of £1.47m (£0.76m). A £662,634 increase in capital employed to £1.4m, excluding short-term loans, reflects the improvement in the group's underlying financial strength, says the chairman. Working capital increased £31,105 against £190,475.

At September 30, 1979, steepfhill held 25.49 per cent of the stock, and International Property Development 23.17 per cent, since increased to 25.01 per cent.

Meeting, London, EC, February 21 at noon.

Throgmorton Trust advances

Pre-tax revenue of Throgmorton Trust expanded from £3.05m to £3.64m for the year ended November 30, 1979, and the dividend is increased to 6.55p net, against 4.875p, with a final of 3.3p.

Tax for the period took £1.16m compared with £984,459, leaving net revenue ahead from £2.06m to £2.48m.

After first half tax of £27,000 against £69,000 net profit was £45,200 (£87,500), giving earnings down from 4.29p to 2.26p per 10p share. To reduce disparity with the final, the net interim dividend is increased to 0.41p (0.34p)—last year's final was 0.553p.

Six months

	1979	1978
Turnover	1,067,966	1,013,548
Pre-tax profit	72,200	168,600
Tax	27,000	69,000
Net profit	45,200	99,600

More efforts are being made to find new business, backed by additional staff appointments in the marketing and sales fields, the directors state.

The group is avoiding some of the more intense competition

A. J. Worthington hit by adverse home market

FOLLOWING a downturn for the whole of the previous year from £290,000 to £214,000, taxable profits of A. J. Worthington, (Holdings) textile manufacturer, more than halved to £72,200 for the six months ended September 30, 1979, compared with £156,800.

Turnover, although 5 per cent higher at £1.07m (£1m) was some 8 per cent lower, the directors say, after allowing for inflation, and this was one of the main reasons for the depressed profit.

Adverse conditions in the home market have continued, and they say there is no sign yet of any improvement. Exports, however, have continued to increase.

from the non-European countries, through its policy of concentration on specialised products made to order.

Rickmansworth £3m issue

Brokers Seymour, Pierce and Co. have completed underwriting arrangements for an offer for sale by tender for Rickmansworth and Uxbridge Valley Water Co.

The company is raising £3m through 9 per cent Redeemable Preference Stock redeemable at par on February 28, 1985. The minimum price is £88 per cent where yields are 13.11 per cent flat and 13.42 per cent to redemption.

60% boost for Rothman's (Malaysia)

A near 60 per cent increase in profits to 9.33m ringgits is reported by Rothman's of Pall Mall (Malaysia) for the six months to December 31, 1979. Group turnover showed a 45 per cent improvement to 165m ringgits.

The results reflect the benefits arising from the installation of additional capacity at its factory, and the group also attributes higher sales to the boycott by the Chinese last year of Rothman's main rival, Malaysian Tobacco Company.

Profits for the second half are expected to achieve a satisfactory level.

Rothman's of Pall Mall (Malaysia) is 50 per cent owned by Rothman's International of the UK. The remainder of the issued shares are publicly traded.

Westland Aircraft Limited

Extracts from the Statement by the Chairman, The Rt. Hon. Lord Aldington, PC, KCMG, CBE, DSO.

I hope that the results of the year, both in the profit and in the sales which have been achieved throughout the Group, will give proper encouragement to our shareholders and our employees. A comparison between 1978 and 1979 made before exceptional items and after interest shows that the achievement of 1979 was one of consolidation of our base for the future, rather than a year of real growth. We have fought our way out of the difficulties of two large contracts. Although output of helicopters improved, we did not achieve all the deliveries of them and some other products which we had planned. It follows that the profit is not as high as it could have been. Moreover, it was a year when an important part of our turnover had to be taken up with those Lynx helicopters and hovercraft for which heavy provisions had been made and from which no profit could arise. But, taking the Group as a whole, all concerned have a right to feel that these results show an improvement in efficiency and show their strong will to succeed.

We have, however, learned some important lessons, which have yet to be applied, to reduce the costs of development and of production, to improve our performance in delivering to time, and to ensure that every part of the Group lives up to the high quality standards for which the Group has earned a high reputation on its principal activities. This we will do; and we will be helped by the improving climate of industrial relations.

The width of our business and the diversity of its products is growing as a result of decisions taken in recent years. We now have to ensure that we reap a proper harvest through efficient project management. I know that our Chief Executive is concentrating much personal effort on production efficiency and on training at all levels of management.

During the year we had successes in the helicopter market. New orders were received from the Royal Navy and from the Federal German Navy and negotiations are at an advanced stage with two overseas customers. We also had the advantage of good spares orders.

Work on developing the WG.30, a transport version of the Lynx, has continued on course and a welcome amount of interest has been shown in many parts of the world.

The next stage in the Sea King replacement project, so important to naval capability in the late 80's, and to helicopter transport generally, is to cement the relationships with our Italian partner, the Agusta Company.

We have suffered one major disappointment; the carefully negotiated arrangements with the Arab Organisation for Industrialisation broke down for reasons quite unconnected with Westland or its products. The initial contracts between ourselves and the A.O.I. and between ourselves and the Arab British Helicopter Company in Egypt were of such a nature that we shall not lose money on them. The risk is that we shall lose further orders on our factories which will be difficult to replace, and this may affect the level of our activity in 1981 and 1982. Meanwhile it should be said that we are discussing the

SUMMARY OF RESULTS	Year to 30th September	
	1979	1978
Turnover	198,160	166,577
Trading surplus before exceptional items and interest	16,163	15,297
Profit/(Loss) before tax	15,266	(2,859)
Profit/(Loss) for the year attributable to shareholders	12,263	(4,731)
Dividends per share	4.0p	1.0p
Earnings/(Loss) per 25p share	20.7p	(8.0p)

Daily Mail and General Trust Limited

Statement by Viscount Rothermere, Chairman

My father died just before the Annual General Meeting in July 1978, and since the current accounting period was extended to 30th September 1979, this is the first occasion I have had the opportunity to make the Chairman's Statement in the Annual Accounts and to pay tribute to my father's work in building up your Company so successfully over the last half century.

It is therefore with pleasure that I can report to you that net Revenue after expenses and taxation in the 18 months to September 1979 was £3,570,000.

After providing for the preference dividend the earnings for the period were 35.1p per share or 23.4p on an annual basis. Excluding the dividend from Associated Newspapers Group, net income from other sources increased in the 12 months to March 1979 by 12% over the year before, and for the 12 months to September 1979 by 20% over the previous year to September 1978.

With income from Associated Newspapers Group showing a significant increase the results for the period can therefore be viewed with some satisfaction.

Because a considerable proportion of our investment portfolio is the holding in Associated Newspapers Group, your Company has been bound by the dividend limitation regulations; in consequence it has not been possible to match increasing income with distributions as have, for example, Authorised Investment Trusts who have been free from those regulations. The end of dividend limitation has meant therefore that the Board has been able to give fresh consideration to the scale of distributions to Shareholders. The total which is now

being recommended exceeds 85% of the amount available; previously the amount we were permitted to distribute has been less than 75%.

During the period, Associated Newspapers Group ceased to be the Company's subsidiary. Nevertheless as you will read in the Directors' Report we shall be continuing to give additional information concerning its results and financial position, so that you can appreciate the diversified strength and successful operations of the Group.

The change of status of Associated Newspapers Group meant the redistribution of some common interests, as was reported earlier in the year. The book profit arising from these and other realisations has exceeded £1 million, with an unavoidable Capital Gains Tax commitment.

As a further result of the altered relationship, the Accounts of Daily Mail and General Trust have needed to be modified. Analysis of Investments has at the same time been altered to expend the information available.

The last eighteen months has seen a remarkable turn round in the strength of Sterling, the progressive effect of North Sea Oil on our balance of payments and the start of the loosening of government control over so much of our lives. The abolition of dividend limitation and later, of Exchange Control has allowed market influences to have much greater effect on investment prices and policy. We earnestly hope that the firm measures taken by the Government will have the effect of combating inflation and reviving industry.

considerable problem of the future, including compensation, with our former partners in this enterprise, people of undoubted goodwill and understanding; and we have the proper support from our own Government.

No further provisions are considered necessary for the first Ministry of Defence Lynx contract. We hope to be in a position by this time next year to bring back something out of the heavy provisions made in earlier years. Of the total turnover on helicopters during the year under review of £144m, £43m was in respect of contracts for which provisions had been made and which therefore contributed no profit; that means that the profit on helicopter work throughout the Group of £9m was earned on a turnover of £101m.

The second Super 4 hovercraft was delivered on time early in May and both Super 4's performed excellently throughout the rest of the year. The warranty on the second Super 4 expires in May 1980 and we shall then be in a position of knowing for certain the total costs of completing this expensive contract and I expect we shall be able to bring back something over £500,000 from the provisions made. Work is proceeding according to plan on the new orders for SRN.6's secured early in the year from two Middle East countries.

A large increase in activity by Normair-Garrett with an even higher increase in earnings augers well for the carefully planned and ambitious increase in business now well under way in control equipment and systems. I congratulate those responsible for the increase in profit of more than 50% to the figure of £4.8m in a year of considerable pressure on technical and managerial resources.

The Westland Technologies Division produced some good results and some less good, but experience indicates we are on the right path to better rewards from a wide variety of activities, new and old, within the Group.

As I forecast the Group's cash position remained comfortable throughout the year. I do not foresee cash problems during the current year.

BOND DRAWINGS

IRELAND

7% Sterling/Denmark Mark Bonds 1981

S.G. WARBURG & CO. LTD., announce that Bonds for the nominal amount of £582,000 have been drawn in the presence of a Notary Public, for the redemption instalment due 1st March, 1980.

The numbers of the Bonds drawn are as follows:-

£500 Bonds					
2741 to 2777	2782 to 2789	2793 to 2795	2817 to 2833	2837 to 2851	
2853 to 2858	2862 2863	2865	2869 to 2874	2874 to 2883	
2811	2913 to 2919	2930 2931	2940 2941	2946 to 2952	
2959 to 2986	2969 to 2971	2978	2981 to 2987	2990 to 2993	
3015 to 3017	3021	3024	3025 to 3031	3034 3035	
3038 to 3040	3045 to 3047	3141 to 3145	3151 to 3153	3229 to 3232	
4242	4246 to 4249	4267 to 4272	4277	4280 to 4289	
4300 4301	4303 4306	4311 4312	4317 to 4322	4324 to 4328	
4336 to 4338	4342 to 4343	4355 to 4361	4371 4385	4414 to 4418	
4428	4442 4439	4446 to 4450	4452 to 4456	4501	
4503 to 4503	4513 to 4516	4523 4525	4545 to 4549	4557 4558	
4578 to 4580	4596	4621 4622	4627 4628	4636	
4649 to 4656	4656 4654	4670 to 4672	4672 4673	4679 to 4684	
4686 to 4688	4696 to 4704	4706	4709 4710	4712 to 4714	
4721	4735 to 4751	4762	4791 to 4794	4799 4800	
4806 to 4824	4827 to 4829	4836 to 4841	4847 to 4849	4852 to 4854	
6931 6932	6936 6941	6945 6946	6954 6956	6976	
6962 to 6983	6991	6996 to 7005	7007 to 7010	7015 to 7020	
7027 to 7036	7043 to 7068	7071	7074 7075	7078 to 7121	
7134 to 7162	7167 to 7183	7185 to 7188	7187	7200 7202	
7119 to 7123	7232	7232 to 7282	7272 7273	7282 to 7308	
7319	7328 to 7352	7354 to 7365	7368 to 7384	7391 7392	
7387 to 7399	7403 7404	7410 7411	7419 7420	7431 7433	
7427 to 7446	7452 7454	7457 7460	7467 7469	7471 to 7483	
7485	7495 to 7499	7501 7501	7519 7520	7522 to 7531	
7544 to 7549	7551 to 7561	7569	7589 to 7571	7575 to 7577	
7580 to 7582	7588 to 7597	7606 to 7612	7614 to 7622	7642 to 7650	

UK NEWS

STOCK EXCHANGE FACES DEFEAT IN RESTRICTIVE PRACTICES CASE

Need for change in securities industry rules

BY CHRISTINE MOIR

THE Stock Exchange is likely to lose its pending case before the Restrictive Practices Court, according to the majority of interviewed for a study on the industry. As a result important changes would need to be made in the basic principles underlying the exchange's rule book. These could be "hasty and ill-considered."

Although most respondents believed the rule book acted in the public interest they thought its practices are identifiable "restrictive" by definition. As a result the court might be able only to rule on whether each practice was restrictive, and, therefore, breaking the law.

If that occurred—and most regarded it as the likely outcome—the traditional separation of function between jobber and broker and the principle of fixed commissions might need to be scrapped overnight.

There was a fear that in the resulting disruption, as happened in America, a large number of medium-sized and small brokers would disappear, leading to the alienation of the private

investor due to higher costs. Institutions might find stock-broking firms charging them separately for research or might have to employ large numbers of research analysts themselves.

The Stock Exchange Council was widely criticised for failing to ensure that the main users of the stock market would defend it in court. "The institutional fraternity wants rational and reasoned change, but the trouble is, the stock exchange won't talk about it," one respondent said.

The fund managers believed the council was wrong in not allowing all the issues "within the family" and setting up a strong contingency plan before the rule book comes to court.

The need for change was becoming acute not only because of the reference to the court but, more importantly, because of internal pressures on the system.

Two weaknesses in the system were pinpointed, which it was felt seriously strained the viability of jobbers and the relationship between brokers and major clients:

● As a result of the enormous increases in public debt the

jobbers had a correspondingly enormous capitalisation requirement. This meant that their numbers had shrunk and the capacity for big block trading was too small while margins were too wide.

● The level of stockbrokers' commissions was too high and there ought to be a discount of perhaps 20 per cent for major users, with a corresponding increase in charges to small clients.

The publication yesterday of a report commissioned by the stockbroking firm of Greaveson Grant highlights a growing debate on the future for the securities industry in the next decade.

The firm commissioned an independent interviewer to assess the views of 24 investment managers drawn from insurance companies, pension funds, merchant banks, investment and unit trusts on the broad issues facing the industry. The issues ranged from the relaxation of exchange controls to the leadership of the Stock Exchange Council in the face of the strains on the principles of separate capacity

and fixed commissions. The outcome is a robust airing of worries and complaints—with occasional pliments—by representatives of the major users of the stock market.

But as Mr. John Brew, a senior partner of Greaveson Grant, pointed out, the criticisms have the flavour of "a family airing of its differences rather than the beginnings of a divorce."

The firm's purpose in commissioning the study was to open a forum in which the institutions could identify weaknesses and areas for change in the field of stock-broking, so that it could start contingency planning.

Both weaknesses would create problems in the 1980s, fund managers believe. The general consensus was that the single capacity system, which forbids market makers (jobbers) to act as agents (brokers) and vice versa, would fail to survive the decade.

A surprising number of respondents took a very robust view about conflict of interest, many as a result of cynical acceptance that it already

existed. Investors did not, for example, expect brokers to publish "sell" recommendations for stocks where the companies were clients of the firm.

Only a few respondents, however, thought that single capacity was vital for the preservation of the Stock Exchange.

A number of other areas of potential conflict of interest gave rise to fierce complaint. In particular, professional fund management groups complained about the way in which stock-broking firms were encroaching on pension fund management.

They were equally annoyed with the fund management activities of merchant banks which obtain special wholesale advantages in dealing in blocks of shares and are not subject to the same controls as the large blocks among discretionary clients.

Other issues raised by the panelists included:

● The Wilson Committee was thought to have had an effect in forcing certain financial institutions to make adjustments but unlikely to make a big impact on public opinion.

● Relations between the City and Whitehall were "barely

adequate."

● Relations with the Bank of England were "excellent," but a growing need for it to take a more active role in regulating the securities industry.

● The Council for the Securities Industry was not regarded as highly effective.

● Stamp duty was an urgent need for abolition.

In spite of recognising that there were important areas of weakness and some which urgently needed change, most respondents thought the City "the best and most efficient financial centre in the world," which would only benefit from the change in Government attitudes.

The abolition of exchange controls was seen as having two big advantages: it could be expected to draw overseas investors into the UK securities market, and it would reduce the threat of UK institutions swamping the UK market as they looked internationally for homes for their funds.

● Prospects for the Securities Industry: A Survey by Francis Kinsman, Published by Greaveson Grant, 59, Gresham Street, London, EC2, £25.

APPOINTMENTS

Saudi International Bank changes

Mr. Andreas R. Frindl and Mr. Barrett R. Petty will be seconded to SAUDI INTERNATIONAL BANK by Morgan Guaranty on April 1. Dr. Frindl, initially will be appointed general manager and executive director designate in anticipation of his appointment as executive director and chief executive

officer later in the year. The latter appointment will occur when the current executive director and chief executive officer, Mr. Edgar C. Felton, who has been seconded to Saudi International Bank since 1976, returns to Morgan Guaranty Trust Company in New York for another assignment.

Mr. Petty will be appointed general manager at Saudi International and will replace Mr. Alfred M. Vinton, Jr. who is currently general manager and who will return to Morgan Guaranty on that date to become vice-president and general manager of Morgan Guaranty in London. Mr. Frindl is currently

general manager of Morgan Guaranty's Tokyo office, and Mr. Petty is in charge of the bank's business in Kuwait and Saudi Arabia.

Saudi International Bank (AI-Bank Al-Saudi Al-Alami) is the London-based international bank in which the Saudi Arabian Monetary Agency (SAMA) holds a 50 per cent interest. The other shareholders are Morgan Guaranty Trust Company (20 per cent), Banque Nationale de Paris (5 per cent), Deutsche Bank (5 per cent), National Westminster Bank (5 per cent), Union Bank of Switzerland (5 per cent), National Commercial Bank (2.5 per cent) and Riyad Bank (2.5 per cent). Morgan Guaranty provides management assistance and technical assistance agreement which was recently renewed by the Board of Saudi International Bank for a further five years.

The Industry Secretary has appointed Mr. Thomas Allen, partner in Peat, Marwick, Mitchell and Co. and Mr. Ian Irvine, a partner in Touche Ross and Co. to the INDUSTRIAL DEVELOPMENT ADVISORY BOARD. Mr. Allen joined Peat, Marwick, Mitchell 1968 and was made a partner in 1968. From 1977 to 1979 he was a member of the Department of Industry's Advisory Committee on the Paper and Board Industry Scheme. Mr. Irvine has been a partner in Touche Ross since 1965. He has extensive responsibilities for U.S. and international work generally.

Mr. J. B. Davies has been appointed export sales director to HARLAND MACHINE SYSTEMS.

HARLAND GROUP has made the following changes: Mr. Erik J. Skog to group financial controller, from financial management in the aeronautical industry and Mr. Robert Harland, of Hull from financial accountant.

Mr. Mel McGilivray, associate director of SPL and managing director of SPL Nederland BV, has been appointed managing director of SPL BELGIUM. Mr. Jim King, sales manager of the RTL/2 Group, has been appointed sales manager, and Mr. Bill Lang, operations manager in Brussels.

At the BRITISH ELECTRIC TRACTION COMPANY Mr. George F. Gray has been appointed a director of the main Board. He is chairman of the plant hire division of the Group, comprising Graydon, Graydon (1947), Edsall Plant Limited and J. D. White Limited. Mr. Gray joined the B.E.T. in 1968, when Graydon became a member of the Group.

CONTRACTS

£9.7m hospital for Milton Keynes

Oxford Regional Health Authority has signed a management contract with TAYLOR WOODROW CONSTRUCTION for the construction of the Milton Keynes District General Hospital. Estimated cost £9.7m.

DOWTY FUEL SYSTEMS has received a £7m order for reheat fuel-control systems for the Rolls-Royce RB199 turbofan engine. Two RB199s power the Tornado and are multi-role engines giving high thrust with reheat for combat and supersonic acceleration, and having low fuel consumption for long-range cruise at sea-level without reheat.

The building and civil engineering divisions of LONDON AND NORTHERN have been awarded substantial contracts in Ireland and the North East and North West of England worth more than £2.5m. The Northern Ireland Electricity Services has awarded W. and J. Taggart (Northern Ireland) Portlough, the site restoration work at Kilfoot Power Station, a contract worth £480,308. In the north east of England, Wilsons (Spenborough) has been awarded a contract valued at £413,000 for revitalisation of dwellings in West Cornforth and South Hiltun, Co. Durham. Border Engineering Contractors in the north west has won contracts worth £1.8m including a £788,000 contract on the Ulster division of the A590 Trunk Road for the Department of Transport and a £665,000 factory extension contract for English Industrial Estates Corporation at Salterbeck, Workington.

SMITHS INDUSTRIES has received £2m orders for 350 electronic engine control units for use with the Rolls-Royce-Allison TF41 engines of the LTV A7s.

The NCB has placed a contract worth £500,000 with QUALTER, HALL AND CO., of Barnsley, South Yorkshire, to connect Houghton, Lancashire, with Nearest Valley colliery by half a mile of belt conveyors. Work involves installing four belt conveyors which will form the link between the two collieries, one bifurcated

environmental dust extraction and a mobile mixer which will mix up to 20 tons per hour of furan sand. The mixer will be fitted with a servo mechanism for automatic variations of speed and resin percentages to further reduce moulding costs.

chute with hydraulic operating gear to the existing Dearn Valley conveyor, one discharge chute and a 6 ft diameter spiral chute. Qualter, Hall is a wholly-owned subsidiary of Matthew Hall and Co.

The OXFORD AIR TRAINING SCHOOL has won a £500,000 contract to train 20 pilots for Sudan Airways. They will be trained to CPL/IR standard. Eleven of the students will begin their training in February, with the balance to follow in April.

THE WESTINGHOUSE ELECTRIC CORPORATION's research and development centre has received a \$687,000 (£300,000) contract from the Department of Energy to evaluate materials for superconducting power transmission. The three-year programme will be conducted as a co-operative effort with three universities: Carnegie-Mellon, Stanford and Harvard. The project will explore the feasibility of using specific superconducting materials at liquid hydrogen temperatures. Research will be two-pronged: one group will study the use of hydrogen as a liquid dielectric for high voltage in the temperature range of -253 degs C. The other group will explore the possibility of making a practical superconductor which can carry high currents at the highest possible temperature and which can be manufactured in quantities.

Anglia Television has placed an order worth around £187,500 for a new PAX telephone exchange to be installed in Anglia House, its headquarters at Norwich. Pye Business Communications will be installing the system.

Reed International Limited

Consolidated Profit Statement for the 9 months ended 31st December 1979

3 Months Ended	9 Months Ended	3 Months Ended	9 Months Ended
31.12.79	31.12.79	31.12.79	31.12.78
£ million (unaudited)	£ million (unaudited)	£ million (unaudited)	£ million (unaudited)
404.7	385.8	1,113.1	1,228.9
247.7	286.9	819.7	717.6
157.0	98.1	293.4	511.3
29.6	32.2	87.5	82.8
1.1	0.6	2.3	4.3
30.7	32.8	89.8	87.1
22.8	22.5	60.9	57.7
8.1	10.3	28.9	29.4
(7.7)	(2.9)	(9.8)	(24.0)
23.0	29.9	80.0	63.1
(12.2)	(11.9)	(28.6)	(31.7)
(8.3)	(8.4)	(20.9)	(19.3)
(3.9)	(3.5)	(7.7)	(12.4)
10.8	18.0	51.4	31.4
(0.2)	(0.2)	(0.9)	(3.3)
10.6	17.8	50.5	28.1
9.4p	15.9p	45.1p	25.0p

As announced in the 1978/79 Annual Report, it is intended to consolidate the results of overseas subsidiaries to a common year-end date with that of the UK companies for the accounting period to 31st March 1980 and thereafter.

It should be noted that:

1. In 1979 the overseas results are consolidated on a co-terminal basis for the 9 months to 31st December 1979. In the comparative figures for the previous year the overseas results were for the 9 months period to 30th September 1978.
2. Overseas results for January to March 1979 are not reported above but will be included with the results for the year to 31st March 1980. For information they totalled: Sales £94m and Profit Attributable to Shareholders £4m.
3. Taxation has been calculated on the basis of SSAP15 and 1978 figures have been restated.

REED INTERNATIONAL LIMITED, REED HOUSE, PICCADILLY, LONDON W1A 1EJ

ELSWICK-HOPPER LIMITED
TURNER INTERNATIONAL (ENGINEERING) LIMITED

In accordance with the agreement dated 20th February 1979 to acquire the whole of the issued share capital of Turner International (Engineering) Limited, Elswick-Hopper Ltd have now issued a further 3,694,444 shares, credited as fully paid and representing 10.3% of the enlarged share capital, to the original vendors of Turners.

As outlined in the circular dated 21st February 1979 to shareholders, under the terms of the agreement a further £3.50 was payable for every £1 by which the profits before tax for the year ended 30th September 1979 exceeded £250,000 subject to a maximum further consideration of £665,000. Turners profits for the period have exceeded £440,000, and therefore the maximum further consideration became payable and has been satisfied by the issue of the shares at a price of 18p per share. These shares rank pari passu with the existing issued shares including the right to receive the interim dividend payable on 1st February 1980 and have been admitted to the Daily Official List by the Council of The Stock Exchange.

As a result of this issue Mr. A.L. Turner and his immediate family now hold 17% of the equity of Elswick-Hopper Ltd.

ELSWICK HOPPER LTD., Friars Court, Friarage Passage, Aylesbury, Bucks HP20 2RT

BASE LENDING RATES

A.B.N. Bank	17%	Guinness Mahon	17%
Allied Irish Bank	17%	Hambros Bank	17%
Amro Bank	17%	Hill Samuel	17%
American Express Bk.	17%	C. Hoare & Co.	17%
Henry Ansbacher	17%	Hongkong & Shanghai	17%
A.P. Bank Ltd.	17%	Industrial Bk. of Scot.	17%
Arbutnot Latham	17%	Keyser Ullmann	17%
Associates Cap. Corp.	17%	Knowsley & Co. Ltd.	17%
Banco de Bilbao	17%	Lloyds Bank	17%
Bank of Credit & Comm.	17%	Edward Manson & Co.	17%
Bank of Cyprus	17%	Midland Bank	17%
Bank of India	17%	Samuel Montagu	17%
Banque Belge Ltd.	17%	Morgan Grenfell	17%
Banque du Rhone et de la Tamise S.A.	17%	National Westminster	17%
Barclays Bank	17%	Norwich General Trust	17%
Bremer Holdings Ltd.	17%	P. S. Refson & Co.	17%
Brit. Bank of Mid. East	17%	Rossminster	17%
Brown Shipley	17%	Ryl. Bk. Canada (Ldn.)	17%
Canada Permut Trust	17%	Schroder & Co.	17%
Cayzer Ltd.	17%	E. S. Schwab	17%
Cedar Holdings	17%	Security Trust Co. Ltd.	17%
Charterhouse Japnet	17%	Standard Chartered	17%
Choulatons	17%	Trade Dev. Bank	17%
C. E. Coates	17%	Truist Savings	17%
Consolidated Credits	17%	Twentieth Century Bk.	17%
Co-operative Bank	17%	United Bank of Kuwait	17%
Cordian Secs.	17%	Whiteaway Laidlaw	17%
The Cyprus Popular Bk.	17%	Williams & Glyn's	17%
Duncan Lawrie	17%	Yorkshire Bank	17%
Eagel Trust	17%		
E. T. Trust Limited	17%		
First Nat. Fin. Corp.	17%		
First Nat. Secs. Ltd.	17%		
Robert Fraser	17%		
Antony Gibbs	17%		
Grayhound Guaranty	17%		
Grindlays Bank	17%		

7-day deposits 15%, 1-month deposits 15%, 3-month deposits 15%, 6-month deposits 15%, 12-month deposits 15%, 18-month deposits 15%, 24-month deposits 15%, 30-month deposits 15%, 36-month deposits 15%, 42-month deposits 15%, 48-month deposits 15%, 54-month deposits 15%, 60-month deposits 15%, 66-month deposits 15%, 72-month deposits 15%, 78-month deposits 15%, 84-month deposits 15%, 90-month deposits 15%, 96-month deposits 15%, 102-month deposits 15%, 108-month deposits 15%, 114-month deposits 15%, 120-month deposits 15%, 126-month deposits 15%, 132-month deposits 15%, 138-month deposits 15%, 144-month deposits 15%, 150-month deposits 15%, 156-month deposits 15%, 162-month deposits 15%, 168-month deposits 15%, 174-month deposits 15%, 180-month deposits 15%, 186-month deposits 15%, 192-month deposits 15%, 198-month deposits 15%, 204-month deposits 15%, 210-month deposits 15%, 216-month deposits 15%, 222-month deposits 15%, 228-month deposits 15%, 234-month deposits 15%, 240-month 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Jam today if you want oil tomorrow

Attitudes towards oil industry profits are changing in the wake of events in Iran and Afghanistan, reports David Lascelles from New York

THE U.S. oil industry was back on the defensive last week, as it announced record earnings for 1979. Bruised by the waves of public indignation that greeted its soaring profits in earlier quarters, it cranked up a massive public relations campaign to justify and explain what was going on.

Companies took out full page advertisements with pie charts showing where the profits came from and where they were going. Exxon's chairman and top executives even held a long press conference to explain why it was a good thing, not a bad one, that the world's largest oil company should have made a profit over \$4bn in 1979.

No doubt the public, battered by rising petrol and heating oil prices, will be deeply sceptical of the offered explanations. But it is probably true that the political crisis over oil profits is passing. For one thing, the windfall profits tax proposed by President Carter to cream off the oil industry's extra earnings from oil price increases is now virtually through Congress, and will shortly cease to be a topic for acrimonious debate.

Vulnerability

For another, the crises in Iran and Afghanistan have sharpened public awareness of the vulnerability of the U.S. to foreign oil supplies—which now account for just under half of total consumption. With any luck, the oil companies reason the public will soon perceive that the energy industry must be given a financial incentive to explore at home if dependence on imports is to be reduced.

Last year could, therefore, turn out to be a landmark in U.S. energy history. Apart from changing public perceptions, it may also usher in a period where the oil industry's financial returns rise to levels at which an adequate energy future can

be financed. This is certainly the view of the stock market, which treated oils as glamour issues throughout 1979 on the expectation of sharply higher returns.

Profit increases last year were strong, to put it mildly, and in many cases truly spectacular. Sohio, BP's U.S. subsidiary, reported an increase of 163 per cent, from \$450m to \$1.2bn, a rise which propelled it into the ranks of the industry giants.

Elsewhere, there had to be special reasons if a company did not record an earnings gain of at least 50 per cent.

Low returns

The oil companies themselves prefer, however, to play down profits in favour of two other points: capital investment and return on equity.

The oil industry has long argued that its return is below the industry average, a claim which is borne out by independent studies. Typically, the industry's return has run around 15 per cent, with the smaller companies above this level and the larger below. That is now changing, however.

Most oil majors increased their return on shareholders' funds by 4 to 6 percentage points in 1979. Exxon was up from 16 to 20 per cent, and Mobil from 13 to 21 per cent. Gulf, traditionally among the less profitable in the oil league, managed to rise from 10.5 to 16 per cent.

But even these impressive gains do not wholly satisfy the industry. Exxon points out that these increases on equity earnings are to some extent illusory, since they are nominal rather than real. Adjusted for inflation, Exxon calculates, its return was not 20 per cent but 11.3 per cent, which is better than the dismal 7.7 per cent earned in the depths of 1977, but nevertheless, below the 12.8 per cent of 1973. Exxon said

that the adjustment was made in the form of standards laid down by the Financial Accounting Standards Board.

Mr. Clifton Garvin, chairman, comments: "Such developments are of concern because of the need to generate funds for the large investment that will be required in the years ahead."

Several common themes emerge from earnings reports. One is that it is easier to earn profits marketing oil products abroad than in the U.S., mainly because of the absence or weakness of price controls in most overseas markets. Texaco, Gulf, Mobil, Standard Indiana (Amoco), Exxon and many others go out of their way to emphasise that overseas earnings rose faster than U.S. earnings.

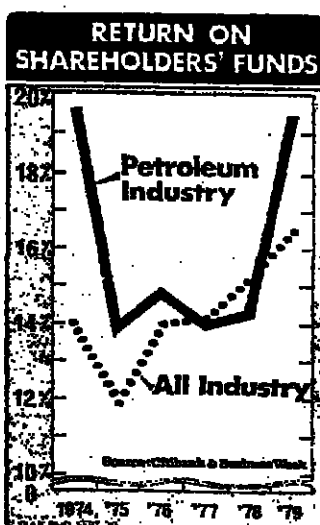
Their stress on this distinction is largely political, since it meets criticism at home that they have been exploiting the U.S. consumer. But it is also clear that U.S. price controls, while easing, still influence the market strongly. Exxon actually reported a loss of \$67m on its U.S. refining and marketing business.

Gain wiped out

Members of the Saudi Arabian consortium also claimed that their so-called "Aramco advantage" had been wiped out by retroactive price increases. Although they obtained their oil at \$18 a barrel against an OPEC price of at least \$24 for much of the year, two Saudi price increases, in mid-summer and early winter, annulled the gain.

Against this, Iran's refusal to supply oil to U.S. companies forced them to make up supplies on the more costly spot markets. So they found themselves squeezed from both sides.

The oil majors are also keen to stress the volume of investments they plan for 1980,



mostly to develop future energy sources. Exxon expects to spend a record \$7.5bn, up from \$6.9bn last year. In real terms, this represents little or no increase, a point quickly seized by critics of Exxon's earnings. Bigger outlays increases are, however, planned at other companies: Mobil 20 per cent, Sohio 55 per cent and Gulf 25 per cent.

Oil industry executives say these outlays would be higher still were it not for the windfall profits tax. They have, however, accepted the inevitability of this tax as the price for decoupling of oil in the U.S., and they are reluctant to argue about it any more.

Broadly, the Bill now emerging from Congress will penalise existing oil production at 70 per cent but give incentives for new or enhanced production by levying tax on this category of oil at the much lower rate of 30 per cent.

The oil industry has entered the 1980s facing perhaps the greatest uncertainties it has ever known. Price prediction has become virtually impossible, events in the Middle East have taken a sharp turn for the worse, and the state of the U.S. economy continues to baffle all and sundry.

Mr. Thornton Bradshaw, president of Atlantic Richfield, says that the energy industry is facing the most extraordinary collection of imponderables that he has ever seen in a January. Yet energy is now a national priority, and this fact alone, the oil industry argues, is reason enough for it to start out the decade financially strong.

Enskilda lifts dividend despite falling short of profits target

BY VICTOR KAYEITZ IN STOCKHOLM

PRE-TAX EARNINGS at Skandinaviska Enskilda Banken (SEB) fell short of the 10 per cent growth in 1979 results predicted in its eight-month report, but the Board proposes to raise the dividend by SKr 1.25 to SKr 10.25 for a payout of SKr 155.9m (\$37.48m) compared with SKr 136.8m last year.

Earnings for 1979 totalled SKr 850m (\$205m) or 7.3 per cent higher than the SKr 788.4m recorded for 1978. The latter figure represents the previously published figure of SKr 810m adjusted downward for changes in accounting of estimated credit losses. These became effective in 1979 and are included in operating costs.

The change in accounting methods makes comparison with the interim reports difficult, but using the old system SEB had reported eight-month earnings of SKr 632m, up 30 per cent from January-August 1978.

The abrupt slowdown in

growth of earnings was probably due to the fact that the Riksbank (central bank) raised the discount rate during the second half of the year from 6.5 per cent to 9 per cent. The Riksbank also increased commercial bank liquidity ratios to 38 per cent and cash requirements to 6 per cent. In January the Riksbank raised the discount rate to 10 per cent.

Additional factors are the failure of long-term lending rates and interest on the government bonds being bought by the banks to finance Sweden's heavy state budget deficit to follow the discount rate. Finally, the commercial banks have been competing hard during the past several months by offering high deposit interest rates for small savers.

Income at SEB rose 3.9 per cent to SKr 2.13bn during 1979. This included a 12.7 per cent jump in net interest income, whereas income from commis-

sions, fees and currency trading rose less than 2 per cent.

The bank showed cost increases totalling 9.7 per cent. The year-end balance sheet was up 22.1 per cent to SKr 63.5bn. Deposits were 7.8 per cent higher at SKr 32.5bn while the bank's lending rose 15.5 per cent to SKr 32.9bn.

SEB had net extraordinary income of SKr 21.7m, against a 1978 net loss of SKr 46.7m. Payments to the employees' profit-sharing trust were SKr 7.8m, down from SKr 24.2m.

The bank's final result before appropriations and taxes was SKr 871.7m, an improvement of 17.5 per cent over 1978. Net profit was 21.7 per cent higher at SKr 192.9m.

The SEB group, including the bank's finance and property subsidiaries and its majority-owned foreign units, showed an 8.4 per cent rise in pre-tax earnings to SKr 1.01bn.

Rights issue from Hoechst

By Guy Hawtin in Frankfurt

HOECHST, one of West Germany's "big three" chemical groups, yesterday announced a surprise rights issue—to raise DM 316.8m (\$182.5m)—and indicated that dividend for 1979 would rise from DM 6 per share to DM 7.

The group's results for the year are not yet available, but Hoechst's profits have certainly followed the course of the other chemical majors. At the end of the first nine months of 1979 the group profits had risen to DM 1.2bn compared with DM 830m, on sales 10 per cent higher at DM 18.9bn.

The rights issue represents an offer of 3.52m shares of DM 50 nominal on a 1-for-12 basis at DM 90 each. This compares with a current trading price of DM 121 per share. The issue will increase group capital from DM 1.85bn to DM 2.03bn.

Hoechst explained that the capital increase had to be seen in connection with the company's worldwide investments in 1979 and 1980 which amount to each year around DM 1.8bn. Both Bayer and BASF denied yesterday that they had plans for capital increases in the foreseeable future.

One of the largest chemical groups in the world, Hoechst has products covering a wide range. Its major divisions are synthetic resins and paints (14 per cent or so of sales) and pharmaceuticals (16 per cent).

In 1978 domestic turnover accounted for around a third of the sales total, with the rest of the EEC taking 20 per cent and North America 10 per cent.

Emminger hits at bank reserves move

NEW YORK—Herr Omar Emminger, the former president of the Bundesbank, told New York bankers that he has grave doubts whether the imposition of reserve requirements on international banks is practical.

Any unilateral move to impose reserve requirements on the international banks of one nation, like the U.S., would result in its banks being put at an unfair advantage.

He added: "I doubt whether there is going to be a start at all on the question of reserve requirements for international banks."

Emphasis had switched to attempting to limit Eurocurrency market growth by focusing on the control of the ratio of banks' capital assets to their lending, said Dr. Emminger. Agencies

Amfas funding plan

BY OUR FINANCIAL STAFF

DUTCH insurance group Amfas plans to raise Fl 114.5m (\$60m) through new issues of equity and debt following a rise in after tax income for 1979 of 15 per cent to Fl 39.5m.

The company is to ask shareholders for the equivalent of \$21m via a one-for-five rights issue at Fl 99 a share. A placing of seven-year bonds with a coupon of 9 1/2 per cent completes the funding programme.

Amfas's net income last year improved to Fl 39.5m from Fl 34.5m, right in line with the management forecasts of December. Revenues rose by 18 per cent to Fl 1.4bn, and the company is lifting dividend from Fl 6.50 a share to Fl 7.20.

The year's premium income increased to Fl 368m from Fl 758m, or by just under 15 per cent.

Subscription date for the bond

placing is February 6, and the price of the bonds will be set two days before this, with payment due March 3.

Philip's French subsidiary Telecommunications Radioelectriques at Telephoniques, has concluded "an accord" with Harris Semiconductors of the U.S.

Under the agreement, Harris is to develop and manufacture new-generation integrated circuit telephone subscriber switchgear. The circuit will constitute the basis for all digital electronic telephone exchanges and will be based on a design patented by TRT.

Sales at TRT last year totalled FFr 880.5m, an increase of 9.7 per cent on the 1978 figure of FFr 882.7m.

TRT provisionally estimated its 1979 consolidated sales at FFr 1.05bn, up 6 per cent from FFr 990.5m in 1978.

London branch for Austrian bank

BY PAUL LENDVAI

ZENTRALSPARKASSE und Kommerzbank, the largest Vienna-based savings bank, has opened a representative office in London, the first Austrian savings bank to do so in a bid to forge closer links with what Dr. Karl Vak, director-general, yesterday called "the foremost financial centre in the world." Speaking at the formal opening, Dr. Vak stressed that the bank seeks to provide intensified contacts for its clients with potential British and foreign business partners. The UK is Austria's 10th largest trading partner. Zentralsparkasse is Austria's fourth largest bank with a con-

solidated balance sheet registering a 20 per cent jump to a peak of Sch 92.9bn last year. The expansion of foreign business was particularly pronounced: the share of foreign business between 1976 and 1979 tripled to 15 per cent of the group total of which 80 per cent is accounted for by Middle Eastern trade.

The bank already has a foreign representative office in Milan. It has 135 branches in Austria, with 98 operating in Vienna. Every third Viennese company does business with Zentralsparkasse and every second household in the federal

capital is a customer.

Turning to the general economic situation in Austria, Dr. Vak pointed to Austria's excellent economic performance last year, with the GNP growth totalling 5 per cent in real terms against the OECD average of 3 per cent.

This year economic growth, as in the rest of the West, will slow down to 2.5 per cent. Dr. Vak has stressed the importance of maintaining the strength of the Austrian schilling by giving priority to the task of stabilisation based on an incomes policy supported by both sides of industry.

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OK TEDI NEGOTIATIONS

Wrestling with gold fluctuations

BY PHILIP BOWRING RECENTLY IN PORT MORESBY

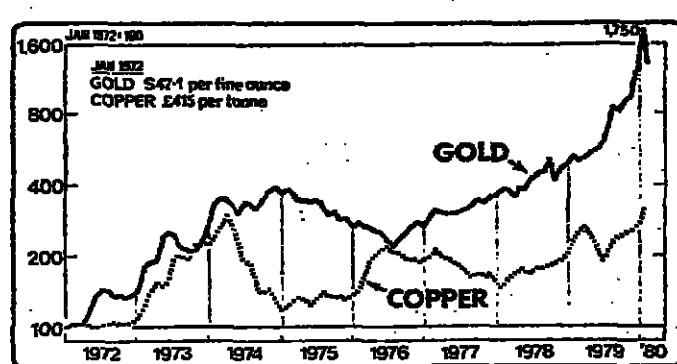
WHILE THE gold price has been performing its acrobatics of past days, two senior executives of the British merchant bank, N. M. Rothschild and Sons have been in Port Moresby to advise the Papua New Guinea Government on its final negotiating stance on the nation's biggest ever project—the Ok Tedi copper/gold mine.

The PNG Government is due by the end of this month to respond to detailed proposals put forward by an Australian-German-U.S. consortium formed to exploit the Ok Tedi deposit. At 1979 prices, investment would be about U.S.\$800m. The rise in the gold price—assuming it does not drop back to U.S.\$200 as quickly as it rose—and the firming of copper prices after a sustained downturn—now make it almost certain that Ok Tedi will go ahead, and probably soon.

But violent price movements, and the difficulty of establishing a yardstick for assessing the medium-term average price of gold, present advisers and negotiators on both sides with extraordinarily complex problems. The consortium, which is being advised by the Bank of America, used a gold price of under U.S.\$200 an ounce for the purposes of its detailed proposal, submitted late last year.

The Ok Tedi high grade copper deposit is in one of the remotest parts of the world, in the Star Mountains in the very centre of the island of New Guinea and close to PNG's border with the Indonesian province of Irian Jaya. It was originally discovered by Kennecott, but the American company's concession lapsed in 1975 because it would not accept PNG conditions for exploitation. That was also before the extent of Ok Tedi's gold content was realised. Kennecott was replaced by the current consortium, which is owned 37.5 per cent each by Broken Hill Proprietary and Amoco, and 25 per cent by a German group comprising Metallgesellschaft, Siemens and Kabel and Metallwerke.

The financial sums are all the more complex because of the peculiar geology of the deposit,



which will mean that Ok Tedi will start off as a pure gold mine, become a copper/gold mine and in its mature phase be largely producing copper.

The cash flow forecasts in the early stages are thus highly sensitive to gold price fluctuations, affecting borrowing requirements, depreciation and a host of other factors. To make matters more complicated the PNG Government sees Ok Tedi as an eventual major source of internal revenue. But questions arise as to whether it wants the Ok Tedi revenue earlier than the end of the decade, as originally estimated, and whether it wants to maximise its return or to maximise the stability of its earnings.

The PNG Government cannot be displeased at higher prices strengthening its negotiating hand, but it may be somewhat alarmed that the careful planning which it put into providing a legal and financial framework for the project may have been overtaken by events in the gold markets.

The main provisions of this framework were that:

● The consortium would make a proposal on a turnkey basis, including all major infrastructure.

● The Government would have the option to take up to 20 per cent of the equity in the consortium, the same percentage that it has in the Rio Tinto-Zinc group's Bougainville Copper.

● Accelerated depreciation would be provided there was sufficient cash flow—allow capital expenditure to be written off

in four years.

● An allowed return on capital of 20 per cent after tax, or 10 per cent above the U.S. Triple A bond rate.

● Return above 20 per cent taxed at 70 per cent gross, giving an effective marginal rate of 56 per cent.

● Flat royalty of 1.25 per cent of FOB value.

● Maximum ordinary tax rate of 35 per cent during the period of recovery of investment. Thereafter, the prevailing PNG profits tax rate, currently 36.5 per cent.

The main provisions are similar to those in the agreement between the Government and Bougainville Copper as renegotiated in 1975. That agreement is up for review soon, but no significant changes are expected.

The Ok Tedi project has three stages, dictated by the geological conditions. The deposit has a cap from which the copper ore has been leached by tropical rain, leaving rock with an average gold content of three grams per ton.

For the first three years, only gold would be mined. With treatment of 15,000 tons of ore a day, gold production would be 400,000 ounces a year.

The next stage, lasting two years, would see copper being mined at 22,000 tons a day with gold continuing at the earlier rate. The final stage would see the separate gold operation phased out and copper ore throughput raised to 45,000 tons a day. The average grade would be close to one per cent. Because a big part of the capital costs lie in infra-

structure, the capital spending for the first stage will probably be about US\$500m out of the project total of US\$800m. Originally the gold cap was seen as a sweetener which would help cash flow in the early years and enable advantage to be taken of the accelerated depreciation allowed.

But at US\$600 an ounce the mine would earn nearly enough in its first stage to cover all the capital costs—which would be reduced by lower capitalised interest charges as second and third stage spending could be largely financed without borrowings.

Though no one can assume that gold will stay anywhere near US\$600 an ounce, let alone US\$800, the PNG Government will still have to do some guessing, as the price will affect not just its own earnings but its approach to two basic financing questions still to be hammered out with the consortium.

The first is the extent to which the project will be financed by borrowings. The consortium has been thinking in terms of a 65:35 debt to equity ratio. But the Government may now want a smaller debt proportion.

The second question is that of infrastructure. Though the consortium was expected to present a complete proposal, the Government may want to build some of the facilities itself and to charge a user fee. The major items are a lowship near the mine site, a road, and a river port on the upper Fly River where barges will be loaded with concentrate and towed to Port Moresby, where a deepwater berth will be constructed for bulk carriers.

Yet another question raised by the gold price is whether the Government will use high gold prices to argue for a substantial lowering in the cut-off grade for ore.

Despite the complications introduced by gold price fluctuations, both sides seem determined to push ahead with the project. They hope to complete negotiations by the end of February and to bring the first stage into production 18 months later.

New Iran banking system in operation

By Andrew Whitely

IRAN'S new banking system is now fully operational, Mr. Ali Reza Nowbari, the Governor of the Central Bank, said yesterday. This follows the nationalisation of all the country's privately-owned banks last June.

The new system will comprise eight banks, including three which existed previously. These are Banks Mellat, Sepah and Saderat, which between them have over three-quarters of the country's bank branches. Corresponding banks in London have been informed of the establishment of two new banks grouping together 20 of those taken over. No particular pattern is discernible in the way the 20 have been divided up, apart from perhaps the need to have an equal division of sizes and financial strength.

The new Bank Mellat (Nation's Bank) groups together the former International Bank of Iran, Bank Bimeh Iran, Bank Darius, the Distributors' Cooperative Credit Bank, the Iran-Arab Bank, Bank Omran, Bank Pars, the Bank of Tehran and the Foreign Trade Bank of Iran.

Mr. Nowbari gave welcome relief yesterday to Chase and other foreign banks which had had shareholdings in Iranian banks when he confirmed that compensation would be paid. He said accountants were calculating the net worth of the banks concerned and payments would be awarded as soon as the results were known.

In the second new bank, Bank Tejarat (Trade Bank), are the former Bank Bazarjani Iran, the International Bank of Iran and Japan, the Credit Bank of Iran, the Iranian Bank, Bank Iranshahr, the Irano-British Bank, the Bank of Iran and the Middle East Bank, Bank Kar, Bank Sanaye Iran, Bank Shahriar and the Mercantile Bank of Iran and Holland.

International commerce had formed an important part of the business of most, but not all, of these 11 banks. The names and identities of the three other banks in the new system were not disclosed yesterday.

Advance in consolidated sales and profit at Honda

BY CHARLES SMITH, FAR EAST EDITOR, IN TOKYO

HONDA MOTOR Company, the world's leading motor cycle maker, and one of Japan's middle range motor manufacturers, has announced consolidated net sales of \$3,920m (¥392,000m) for the first nine months of its current fiscal year.

The figure was a "considerable" increase on last year's sales, Honda says, but no direct comparison is possible because Honda has not previously published quarterly (or three-quarterly) business results. Net profits for the first nine months of the fiscal year came to \$75m (¥7,500m), also a substantial rise on the year-ago figure.

Honda attributes the improvement in its sales figures mainly to higher overseas sales "especially in the key American market." Some 66 per cent of

its total sales for the period was made abroad. Overseas sales for the nine months exceeded the total for the whole of the previous 12 months period (\$2,700m as compared with \$2,670m in the years ending February 28, 1979). Sales in the Japanese market, which accounted for 30 per cent of Honda's turnover, grew more slowly than overseas sales.

Honda says that its consolidated net profit figures would have been higher but for the effects of FASB, the controversial U.S. accounting regulation, on foreign currency adjustments. It adds that the high level of the tax provision made during the third quarter in relation to consolidated income also reflects the distorting effects of FASB. Honda is one of several Japanese companies the busi-

ness results of which have been affected by FASB. Another notable victim of U.S. accounting regulations is Sony Corporation.

Honda's dollar-denominated business results were converted from yen figures at a rate of one dollar equals ¥245 (the rate prevailing on the final day of the business period). The company is one of several major Japanese motor manufacturers whose American sales have grown extremely quickly in recent months, partly because of the impact of a weak yen on export prices and partly because of unsatisfied demand for small cars in the U.S. market. Honda led its larger competitors in reacting to this situation by announcing plans for the assembly of cars in the U.S.

Record results for Shiseido

BY YOKO SHIBATA IN TOKYO

SHISEIDO, JAPAN'S largest cosmetics manufacturer, has announced record sales and earnings for the fiscal year to November 30, though the earnings performance fell slightly short of their target.

Operating profits went up by 3.3 per cent to ¥23,220m (\$97m) and net profits rose 5.6 per cent to ¥10,370m, on sales of ¥278,630m (\$11,200m), up 5.2 per cent on the previous year. Per share profits were ¥54.23, compared with ¥56.53.

The company's cosmetics sales fared well in the summer, but were hit subsequently by the long spell of rainy weather in

the autumn. Heavy competition held back sales of shampoos. The company's cosmetic sales went up by 4.8 per cent, to account for 86 per cent of total sales. Sales of soaps went up by 5.5 per cent, to account for 9 per cent of the total. Sundry goods sales rose by 17.4 per cent, to make up 4 per cent of all sales.

The company has a high reputation for profitability and financial stability. Its financial balance (interest and dividends received less interest and dividends paid) showed a ¥3.2bn net surplus for the year.

Cost increases, such as those

in medical supplies and perfumes, were offset by the company's rationalisation measures.

For the current fiscal year, the company expects operating profits to reach ¥24.2bn, up 4 per cent, and net profits ¥10.7bn, also up 4 per cent, on sales of ¥300bn, up 7 per cent. The company bases the earnings target on its putting stress on toiletry goods and overseas sales. Cost rises are to be covered by further rationalisation measures, not by resorting to the marking-up of prices.

Yen rise hits Nissan Australia

BY JAMES FORTH IN SYDNEY

NISSAN MOTOR Company (Australia) Pty., 100 per cent owned by the Nissan motor vehicle group of Japan, incurred a loss of A\$13.4m (U.S.\$14.8m) in the year to June 30, 1979.

Total losses for the past two years amount to more than A\$33m, but Mr. Chusi Uetani, the deputy managing director of the company, said yesterday that the group was now well on the recovery road, and had already reached "break even" point in terms of profit.

The latest deficit, he stressed, had been incurred in the first half of the trading year, when the value of the yen went to record levels against the Australian dollar. This had caused heavy rises in costs of imports from the Japanese parent.

Mr. Uetani also pointed out that the Australian car market was highly competitive in the final six months of 1979, which put further pressure on the company. Moreover, the company was feeling the effects of its big investment programme in Australia, which was only completed last month. This included the construction of a new assembly and engine plant in Melbourne, Victoria.

The group's performance, Mr. Uetani said, had improved markedly in the second half, and this had continued into the first half of the 1979-80 financial year. He pointed out that the A\$13.4m loss was still an improvement on the A\$20.1m deficit in the previous year. The

group had been helped by the easing in value of the yen against the Australian dollar.

This result from Nissan will make an interesting comparison with that of Chrysler Australia, which is due to report its 1979 results within the next few weeks. The Japanese group Mitsubishi last year acquired a one-third stake in Chrysler with

an option to lift its holding later to a controlling interest. Chrysler, which has lost more than A\$60m in the past few years, earned A\$1.6m in the June half-year, its first profit since the 1975 June half. A major factor in the turnaround was the popularity of the Mitsubishi-designed Sigma four-cylinder vehicle.

Morgan Guaranty Trust Company

OF NEW YORK

Consolidated statement of condition
December 31, 1979

Assets	In thousands
Cash and due from banks	\$ 7,054,934
Interest-bearing deposits at banks	6,009,917
Investment securities (market value: \$2,986,748,000)	3,174,265
Trading account securities, net	481,635
Federal funds sold and securities purchased under agreements to resell	392,900
Loans and lease financing	21,746,042
Less: allowance for possible credit losses	208,380
Net loans and lease financing	21,537,662
Customers' acceptance liability	2,086,007
Premises and equipment, net of accumulated depreciation of \$109,893,000	146,393
Other assets	1,420,813
Total assets	\$42,284,526

Liabilities	
Demand deposits in offices in the U.S.	\$ 9,876,976
Time deposits in offices in the U.S.	3,709,768
Deposits in offices outside the U.S.	16,711,182
Total deposits	30,297,926
Federal funds purchased and securities sold under agreements to repurchase	3,326,696
Commercial paper	269,285
Other liabilities for borrowed money	2,954,270
Accrued taxes and expenses	699,499
Liability on acceptances	2,067,335
Dividend payable	35,000
Convertible debentures (4 1/4%, due 1987)	50,000
Floating-rate French franc notes (due 1989)	73,650
Capital notes (5%, due 1992)	70,396
Other long-term debt	33,430
Other liabilities	582,333
Total liabilities	\$40,459,820

Stockholder's equity	
Capital stock, \$25 par value (authorized and outstanding: 10,000,000 shares)	\$ 250,000
Surplus	518,385
Undivided profits	1,056,321
Total stockholder's equity	1,824,706
Total liabilities and stockholder's equity	\$42,284,526

Member, Federal Reserve System, Federal Deposit Insurance Corp.
Incorporated with limited liability in the State of New York, U.S.A.

23 Wall Street, New York 10015

London: 33 Lombard Street and 31 Berkeley Square

Banking offices also in St. Helier, Paris, Brussels, Antwerp,
Amsterdam (Bank Morgan Labouchere N.V.), Frankfurt,
Düsseldorf, Munich, Zurich, Geneva, Milan, Rome, Madrid,
Tokyo, Hong Kong, Seoul, Singapore, Nassau, Buenos Aires

Representative offices in Beirut, Sydney, Jakarta,
Kuala Lumpur, Manila, São Paulo, Caracas

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Chairman of the Board

ROBERT V. LINDSAY
President

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Chairman and President
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Chairman of the Board
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DENNIS WHEATSTONE
Chairman of the Executive Committee

The Bank of Tokyo, Ltd.
Negotiable Floating Rate U.S. Dollar
Certificates of Deposit
Series A Maturity date
30 July 1980

In accordance with the provisions of the
Certificates of Deposit notice is hereby given
that for the final six month interest period from
30 January 1980 to 30 July 1980 Certificates will
carry an interest rate of 15% per annum.

Agent Bank
The Chase Manhattan Bank, N.A.,
London

Toyota buys
out Australian
operation

By Our Sydney Correspondent

THIESSE HOLDINGS, the coal, civil engineering and motor vehicle group, has agreed to sell its 60 per cent controlling interest in the Thiesse Toyota Company to the Japanese car group for A\$28.52m (U.S.\$29.4m).

Thiesse Toyota holds the franchise in Australia for distribution of Toyota and Hino commercial, and Toyota industrial vehicles. Negotiations with Toyota started in 1976 when the Japanese group indicated it wanted to review its franchise operations which would be timed to coincide with the expiration of the existing agreement. The talks first came to light late last year amid a bitterly contested A\$460m takeover bid for Thiesse from the industrial and mining group, CSR. At the time Toyota, which holds about 9 per cent of the capital of Thiesse, indicated that it would support the Thiesse board, which was recommending rejection of the bid.

CSR, however, now holds more than 60 per cent of the capital of Thiesse and the Thiesse board has recommended acceptance by retaining shareholders. CSR was aware of the Thiesse talks with Toyota and agreed with the decision to sell. The deal is subject to certain conditions, including the approval of the Foreign Investment Review Board and is expected to be completed in March.

Provided the conditions are forthcoming, the Thiesse stake will be acquired by Toyota Motor Sales Company and Toyota Motor Company and will give the Japanese group 100 per cent ownership of its commercial vehicle distribution.

African Development Bank

U.S. \$40,000,000
Floating Rate Notes due 1983

For the six months
30th January, 1980 to 30th July, 1980

In accordance with the provisions of the Note,
notice is hereby given that the rate of interest
has been fixed at 15 per cent and that the interest
payable on the relevant interest payment date, 30th
July, 1980 against Coupon No. 4 will be U.S. \$75.83.

By: Morgan Guaranty Trust Company of New York, London Agent Bank.

CHASE MANHATTAN OVERSEAS
BANKING CORPORATION

FLOATING RATE NOTES DUE 1983

For the six months
30th January 1980 to 30th July 1980

In accordance with the provisions of the Notes,
notice is hereby given that the rate of interest
has been fixed at 14 1/2 per cent and that the interest
payable on the relevant interest payment date, 30th
July 1980 against Coupon No. 4 will be U.S. \$75.20.

Agent Bank: Morgan Guaranty Trust Company of New York, London

دکتر من الهم

CURRENCIES, MONEY and GOLD UK NEWS

Pound improves

Sterling rose slightly while the dollar showed little change in the foreign exchange trading yesterday. The pound opened at \$2.2510-2.2520, and fell to \$2.2450-2.2460. On the nervousness about the strike by steelworkers. It is probable that the Bank of England intervened to steady the decline, and helped by some natural demand sterling improved to \$2.2535 at noon.

During the afternoon the pound continued to rise, influenced by the announcement of higher Middle East oil prices, touching \$2.2605-2.2615, before a general improvement by the dollar pushed sterling down to \$2.2515-2.2525 at the close, a rise of 36 points on the day. Its trade-weighted index, as calculated by the Bank of England, fell to 71.4 from 71.6, after standing at 71.3 at noon and in the morning.

The dollar traded within a narrow range of DM 1.7345 to DM 1.7375 against the D-mark, and finished at DM 1.7370, compared with DM 1.7385 Monday. It also eased slightly against the Swiss franc, to finish at Sfr 1.6170 compared with Sfr 1.6180, and to Y239.30 from Y240.25 in terms of the Japanese Yen. The dollar's index on Bank of England figures, fell to 85.0 from 85.1.

D-MARK—Very strong, but showing a steeper trend within the European Monetary System recently. The D-mark eased slightly against other members of the EMS, except the Irish punt which was unchanged at DM 3.70 at the Frankfurt closing. The French franc improved to DM 42.76 from DM 42.72, and the Italian lira to DM 2.151 from DM 2.149. Outside the EMS the Swiss franc, which rose from DM 1.6170 to DM 1.6170, but sterling fell to DM 3.9130 from DM 3.9260. The Bundesbank did not intervene at the fixing when the dollar rose to DM 1.7361 from DM 1.7349.

IRISH LIRA—Firmly improved after falling from the top of EMS last November. The lira improved against most of its EMS partners at the Milan fixing, including the D-mark which fell to L1.683 from L1.685. On the other hand the French franc rose to L1.983 from L1.984, and the Irish punt to L1.721 from L1.719.80.

Among non-EMS currencies the dollar was unchanged at L807.45, but sterling declined.

FRENCH FRANC—Strongest member of the EMS since last December. The franc lost ground against most EMS currencies, but improved slightly against the D-mark at the Paris fixing.

BELGIAN FRANC—Generally weakest member of EMS, but resists devaluation. The Belgian currency showed mixed changes within the EMS improvement against the D-mark, Dutch guilder and Danish krone at the Brussels fixing, but losing ground against the Irish punt, and French franc, while the lira was unchanged at Bfr 4.491 per L100. Elsewhere the dollar was fixed at Bfr 38.20 compared with Bfr 38.19, and sterling fell to Bfr 63.525 from Bfr 63.750.

DUTCH GUILDER—Firmly in recent weeks, near top of EMS. The guilder weakened against most of its EMS partners, but improved slightly against the D-mark which eased to Fl 1.0445, and the Irish punt which fell to Fl 0.6960 from Fl 0.6970. The French franc fell to Fl 1.9165 at the Amsterdam fixing, while sterling fell to Fl 3.320 from Fl 3.370.

DANISH KRONE—Basically weak, suffering two devaluations since EMS began last March. The krone lost ground against the French franc, which rose to Dkr 1.3352 from Dkr 1.3355, but improved against other EMS currencies, except the lira.

THE POUND SPOT AND FORWARD

Jan. 29	Day's spread	Close	One month	% Three months
U.S.	2.2450-2.2515	2.2510-2.2520	0.02-0.02 pm	3.04 1.75-1.85 pm
Canada	2.1850-2.2020	2.2000-2.2010	1.10-1.00 pm	4.01 2.60-2.45 pm
Belgium	4.200-4.250	4.210-4.220	2.10-1.00 pm	8.26 7.40 pm
Denmark	6.30-6.35	6.30-6.35	1.10-1.00 pm	1.10-1.00 pm
France	1.980-1.990	1.985-1.990	0.07-0.07 pm	1.30 0.30-0.30 pm
Germany	1.71-1.72	1.71-1.72	0.07-0.07 pm	0.07-0.07 pm
Italy	1.10-1.12	1.10-1.12	0.07-0.07 pm	0.07-0.07 pm
Japan	240.00-240.25	240.00-240.25	0.07-0.07 pm	0.07-0.07 pm
Netherlands	1.60-1.62	1.60-1.62	0.07-0.07 pm	0.07-0.07 pm
Portugal	1.10-1.12	1.10-1.12	0.07-0.07 pm	0.07-0.07 pm
Spain	1.10-1.12	1.10-1.12	0.07-0.07 pm	0.07-0.07 pm
Sweden	1.10-1.12	1.10-1.12	0.07-0.07 pm	0.07-0.07 pm
Switzerland	1.10-1.12	1.10-1.12	0.07-0.07 pm	0.07-0.07 pm
UK	1.10-1.12	1.10-1.12	0.07-0.07 pm	0.07-0.07 pm

THE DOLLAR SPOT AND FORWARD

Jan. 29	Day's spread	Close	One month	% Three months
U.S.	2.2450-2.2515	2.2510-2.2520	0.02-0.02 pm	3.04 1.75-1.85 pm
Canada	2.1850-2.2020	2.2000-2.2010	1.10-1.00 pm	4.01 2.60-2.45 pm
Belgium	4.200-4.250	4.210-4.220	2.10-1.00 pm	8.26 7.40 pm
Denmark	6.30-6.35	6.30-6.35	1.10-1.00 pm	1.10-1.00 pm
France	1.980-1.990	1.985-1.990	0.07-0.07 pm	1.30 0.30-0.30 pm
Germany	1.71-1.72	1.71-1.72	0.07-0.07 pm	0.07-0.07 pm
Italy	1.10-1.12	1.10-1.12	0.07-0.07 pm	0.07-0.07 pm
Japan	240.00-240.25	240.00-240.25	0.07-0.07 pm	0.07-0.07 pm
Netherlands	1.60-1.62	1.60-1.62	0.07-0.07 pm	0.07-0.07 pm
Portugal	1.10-1.12	1.10-1.12	0.07-0.07 pm	0.07-0.07 pm
Spain	1.10-1.12	1.10-1.12	0.07-0.07 pm	0.07-0.07 pm
Sweden	1.10-1.12	1.10-1.12	0.07-0.07 pm	0.07-0.07 pm
Switzerland	1.10-1.12	1.10-1.12	0.07-0.07 pm	0.07-0.07 pm
UK	1.10-1.12	1.10-1.12	0.07-0.07 pm	0.07-0.07 pm

CURRENCY RATES CURRENCY MOVEMENTS

Jan. 29	Bank rate	Spot rate	Forward rate	Jan. 29	Bank rate	Spot rate	Forward rate
U.S.	17	0.581825	0.584603	U.S.	17	0.581825	0.584603
Canada	12	1.163650	1.163650	Canada	12	1.163650	1.163650
Belgium	12	1.163650	1.163650	Belgium	12	1.163650	1.163650
Denmark	12	1.163650	1.163650	Denmark	12	1.163650	1.163650
France	12	1.163650	1.163650	France	12	1.163650	1.163650
Germany	12	1.163650	1.163650	Germany	12	1.163650	1.163650
Italy	12	1.163650	1.163650	Italy	12	1.163650	1.163650
Japan	12	1.163650	1.163650	Japan	12	1.163650	1.163650
Netherlands	12	1.163650	1.163650	Netherlands	12	1.163650	1.163650
Portugal	12	1.163650	1.163650	Portugal	12	1.163650	1.163650
Spain	12	1.163650	1.163650	Spain	12	1.163650	1.163650
Sweden	12	1.163650	1.163650	Sweden	12	1.163650	1.163650
Switzerland	12	1.163650	1.163650	Switzerland	12	1.163650	1.163650
UK	12	1.163650	1.163650	UK	12	1.163650	1.163650

OTHER MARKETS

Jan. 29	Rate	Jan. 29	Rate
Argentina	3780-3790	Australia	27.85-28.10
Australia	27.85-28.10	Canada	64.00-65.10
Canada	64.00-65.10	Denmark	12.15-12.25
Denmark	12.15-12.25	France	9.15-9.25
France	9.15-9.25	Germany	12.15-12.25
Germany	12.15-12.25	Italy	12.15-12.25
Italy	12.15-12.25	Japan	12.15-12.25
Japan	12.15-12.25	Netherlands	12.15-12.25
Netherlands	12.15-12.25	Portugal	12.15-12.25
Portugal	12.15-12.25	Spain	12.15-12.25
Spain	12.15-12.25	Sweden	12.15-12.25
Sweden	12.15-12.25	Switzerland	12.15-12.25
Switzerland	12.15-12.25	UK	12.15-12.25
UK	12.15-12.25	USA	12.15-12.25

EMS EUROPEAN CURRENCY UNIT RATES

Jan. 29	Rate	Jan. 29	Rate
Belgium	38.7092	France	119.25
France	119.25	Germany	1.77336
Germany	1.77336	Italy	1.936
Italy	1.936	Netherlands	1.77336
Netherlands	1.77336	Portugal	1.77336
Portugal	1.77336	Spain	1.77336
Spain	1.77336	Sweden	1.77336
Sweden	1.77336	Switzerland	1.77336
Switzerland	1.77336	UK	1.77336
UK	1.77336	USA	1.77336

EXCHANGE CROSS RATES

Jan. 29	Rate	Jan. 29	Rate
Pound Sterling	1.0000	U.S. Dollar	0.4444
U.S. Dollar	0.4444	Deutsche Mark	0.5556
Deutsche Mark	0.5556	Japanese Yen	1.0000
Japanese Yen	1.0000	French Franc	0.0444
French Franc	0.0444	Swiss Franc	0.0444
Swiss Franc	0.0444	Dutch Guilder	0.0444
Dutch Guilder	0.0444	Italian Lira	0.0444
Italian Lira	0.0444	Canadian Dollar	0.0444
Canadian Dollar	0.0444	Belgian Franc	0.0444

EURO-CURRENCY INTEREST RATES

Jan. 29	Rate	Jan. 29	Rate
Short term	17.15-17.25	U.S. Dollar	12.15-12.25
U.S. Dollar	12.15-12.25	Deutsche Mark	12.15-12.25
Deutsche Mark	12.15-12.25	Japanese Yen	12.15-12.25
Japanese Yen	12.15-12.25	French Franc	12.15-12.25
French Franc	12.15-12.25	Swiss Franc	12.15-12.25
Swiss Franc	12.15-12.25	Dutch Guilder	12.15-12.25
Dutch Guilder	12.15-12.25	Italian Lira	12.15-12.25
Italian Lira	12.15-12.25	Canadian Dollar	12.15-12.25
Canadian Dollar	12.15-12.25	Belgian Franc	12.15-12.25

INTERNATIONAL MONEY MARKET

German rates ease

German call money fell sharply yesterday to 7.0-7.5 per cent compared with 8.0-8.5 per cent on Monday, amid speculation that the Bundesbank may take steps to alter current levels of liquidity. However this was seen as not necessarily implying any change in credit policies. Such a move would normally be announced after the fortnightly Central Bank council meeting, and as yet the authorities have not announced any intention of holding a press conference after this Thursday's meeting.

In Amsterdam call money rose slightly to 10.1 per cent from 10.0 per cent while longer term rates were generally mixed. The Dutch Central Bank is to offer further special advances for the period January 31 to February 10 at a rate of 11.4 per cent. This is 4 per cent below the last special advance which ran for only six days to January 23.

In Paris call money fell back to 12.1 per cent from 12.4 per cent on Monday, with longer term rates also easier where changed. One-month money fell to 12.1 per cent and six-month to 12.4 per cent.

Yields on U.S. Treasury bills rose in early trading in New York with 13-week bills at 12.14 per cent against 11.94 per cent at the auction and 11.90 per cent against 11.94 per cent on 26-week bills. Federal funds were weaker than on Monday with early trading at 13.1 per cent compared with 14 per cent previously.

UK MONEY MARKET

Continued shortage

Bank of England—Minimum Lending Rate 17 per cent (since November 15, 1979).

Once again day to day credit was very short supply in the London money market yesterday, with the repayment of Monday's large official advances being the main factor draining funds. There was also a small excess of revenue transfers to the Exchequer over Government disbursements and a small net take up of Treasury bills to finance. To counter these, the authorities gave assistance on a very large scale, made up of small purchases of Treasury bills both from the banks and discount houses. A part of these bills are for resale at a future date. The Bank also bought a small number of corporation bills from the banks and a small amount of eligible bank bills, all of the latter for resale at a future date.

Discount houses obtained most of their funds at 17 per cent, with some money found later in the day down to 16.1 per cent. In the interbank market overnight loans opened at 17.1 per cent by lunchtime. With funds drying up later in the day, rates rose to 17.1 per cent, and late balances were taken at 20 per cent.

Rates in the table below are nominal in some cases.

LONDON MONEY RATES

Jan. 29	Rate	Jan. 29	Rate
Overnight	17.15-17.25	U.S. Dollar	12.15-12.25
U.S. Dollar	12.15-12.25	Deutsche Mark	12.15-12.25
Deutsche Mark	12.15-12.25	Japanese Yen	12.15-12.25
Japanese Yen	12.15-12.25	French Franc	12.15-12.25
French Franc	12.15-12.25	Swiss Franc	12.15-12.25
Swiss Franc	12.15-12.25	Dutch Guilder	12.15-12.25
Dutch Guilder	12.15-12.25	Italian Lira	12.15-12.25
Italian Lira	12.15-12.25	Canadian Dollar	12.15-12.25
Canadian Dollar	12.15-12.25	Belgian Franc	12.15-12.25

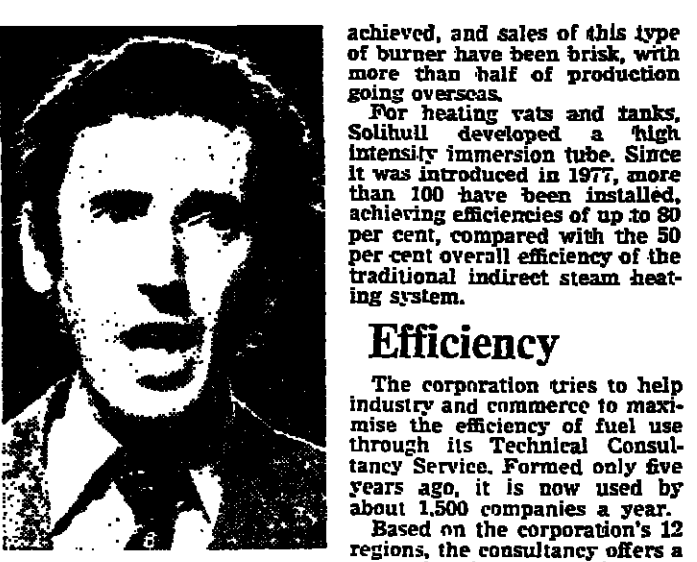
ENERGY MANAGEMENT BY MAURICE SAMUELSON

Gas conservation: a campaign for more frugal use of hot air

PRICING RATHER than preaching is the central strand of the Government's energy conservation policies. Mr David Howell, Energy Secretary, made this clear last week when he complained that the British Gas Corporation had been selling domestic gas at rock bottom prices and now profit at a time when the need to save energy was so great.

However, the corporation itself has been far from passive in the campaign for more efficient and frugal use of energy among its customers. Faced with tightening supplies, it has put information and conservation techniques at the forefront of its activities. Sir Denis Rooke, the chairman, has claimed that more efficient use of gas could save Britain 45m therms a year in the next two decades, equal to the resource of a small gas field.

The corporation's conservation effort has drawn applause from the same quarters which were so vociferous in criticising the latest price rise. Mr John Evans, the National Gas Consumers' Council's director, praises it for its publicity on conservation, its development of more efficient appliances, its home advisory service, and readiness to display insulation materials in some gas showrooms.



David Howell: complaints on gas underpricing

Gas turbines are a highly efficient way of using the fuel and the Corporation ought to encourage their installation by dropping this obstacle, Mr. Jones says. The possibilities are shown, for example, by a gas turbine being installed on an industrial estate in Slough, Bucks, to power a 23 Megawatt combined heat and power plant. However, some similar schemes in other parts of the country have been abandoned because the corporation will not supply gas on an interruptible contract.

Any change of policy by the corporation, though, would be contentious at a time when its supplies are so stretched that it is taking on virtually no new interruptible customers.

Award

However, Mr. Jones supports all the Corporation's efforts to boost conservation through education, research and development, and through its regional Technical Consultancy Service, as well as its annual gas energy management award.

The education campaign is carried out principally at the School of Fuel Management, the first of its kind to train managers and engineers from industry in fuel utilisation. Its courses are run at the British Gas Midlands Research Station at Solihull, near Birmingham, and have been taken by about 2,000 directors and managers, who are shown how to carry out energy audits of their companies. It also provides basic training in combustion engineering.

On a wider front, British Gas runs an energy advice centre in Birmingham. Its 12 regions organise their own seminars aimed at meeting local needs.

The corporation's technical advances in conservation have largely been developed at Solihull where the Midlands Research Station has been responsible for a variety of improved combustion systems and heating applications, such as recuperative burners, vat and tank heaters and rapid heating furnaces.

The recuperative burner is one of the research station's biggest success stories. It reduces fuel consumption by preheating

the combustion air. Fuel savings of up to 45 per cent have been achieved in many high-temperature furnace applications.

Other benefits include reduced production costs, greater productivity and better working conditions. The unit, combining a nozzle mixing gas burner and a simple heat exchanger, extracts the flue gases from the furnaces and preheats the combustion air by up to 500 degrees C.

Recuperative burners were launched on to the market five years ago. There are now more than 70, installed in about 35 industrial applications, including forging furnaces, ceramic kilns, metal crucible furnaces and enamel furnaces. More recently, a new generation of low cost recuperative burner has been planned for lower temperatures.

British Gas claims that recuperative burners promise a potential fuel saving in the UK alone of 500m therms a year, more than the total annual consumption of domestic gas in Scotland.

Rapid heating machines, developed at the research station, are another energy saving concept which is catching on in the metal industry. They are used to maintain a high quality metal throughout the heating process. Fuel savings of up to 76 per cent have been achieved.

Since the scheme was launched four years ago, there have been 156 entrants who are said to have saved enough gas to supply more than 40,000 households a year, or cities the size of Oxford and Cambridge.

Two prizes are presented, to industry and to a commercial or institutional customer, with their respective local consultancy unit cited as joint winner. Last year's industrial award, presented in November, went to E. Kaye of Enfield, Middlesex, for achieving a 75 per cent fuel cut by installing new furnace heaters. Joint winner was the corporation's Eastern Region. The other prize went to Berkshire County Council and Southern Gas for a fuel conservation programme in existing buildings and the construction of a "low energy" school.

Oil 'could pay for business tax cuts'

THE GOVERNMENT should use the extra leeway created by rising North Sea oil revenues to cut business taxes in the March Budget, according to the latest Lloyd's Bank economic bulletin, published today.

The bulletin, by Mr. Christopher Johnson, the bank's economic adviser, says business tax cuts could be financed either by the expected increase in the yield of Petroleum Revenue Tax or planned reductions in public spending.

The reductions in income tax and increases in Value Added Tax in last year's Budget brought a benefit mainly to higher income earners, and the burden of income tax in the UK is now not particularly high. Cuts in business taxes would be more cost efficient than further reductions in income tax as a stimulus to enterprise, the bulletin says.

The rise in the value of sterling against the dollar, the bank has made it more difficult for companies to compete internationally. "So there would be rough justice in using the oil revenues to lighten their tax burden."

Budget increases on drinks 'would cut sales' say brokers

His view, which is unlikely to provoke much dissent in the drinks sector, is based on expectations of a sharp fall in consumption of wines and spirits this year before taking account of any Budget changes. He believes the fall could be as much as 15 per cent.

But if the duties on spirits are raised, by £1 a bottle and on wines by 30p a bottle, the decline in consumption could be even larger. A drop of a fifth would provide the Government with only £10m of extra revenue in 1980-81 compared with the current financial year.

If the tax on beer were raised by 3p a pint and consumption remained unchanged then the additional revenue would be about £350m.

Mr. Mitchell says that, if beer consumption rises, as he expects, by 2 per cent this year, and there is no change in consumption of wines and spirits, the additional tax receipts would be £76m in a full year.

However, if consumption of wines and spirits falls by 15 per cent, and beer consumption is unchanged the likely extra revenue would be around £445m. This increase of the size mentioned above would raise the retail prices index by 1.6 per cent.

NEW YORK

Jan. 29	Rate	Jan. 29	Rate
Prime Rate	15.15	U.S. Dollar	12.15-12.25
U.S. Dollar	12.15-12.25	Deutsche Mark	12.15-12.25
Deutsche Mark	12.15-12.25	Japanese Yen	12.15-12.25
Japanese Yen	12.15-12.25	French Franc	12.15-12.25
French Franc	12.15-12.25	Swiss Franc	12.15-12.25
Swiss Franc	12.15-12.25	Dutch Guilder	12.15-12.25
Dutch Guilder	12.15-12.25	Italian Lira	12.15-12.25
Italian Lira	12.15-12.25	Canadian Dollar	12.15-12.25
Canadian Dollar	12.15-12.25	Belgian Franc	12.15-12.25

£28,000 for Italian embroidery at Christie's

THE HIGHLIGHT in the London salerooms yesterday was the £28,000-plus 11.5 per cent by buyer's premium and VAT—paid by the Foundation Abegg of Switzerland for a piece of embroidery. The embroidery was completed about 1850 in Italy and covered 47 inches by 37 inches, making it unique both in age and size.

The grey satin panel is covered with a pattern of yellow flowers and was bought after by six museums and private collectors who pushed the price above Christie's South Kensington's forecast of £2,000-£3,000. It is almost certainly a record auction price for an item of embroidery.

Phillips held an Impressionist and modern picture sale which totalled £56,625. The Chelsea Arts Club raised £11,400 for renovations to its premises by selling 10 of its pictures, among them a portrait by John Singer Sargent of the artist Robert Brough for £5,500. It was bought by the Fine Art Society. Another former member, Philip Wilson Steer, contributed £1,450 to the club with a landscape which was sold to Splink.

Assurance tax relief stays

THE GOVERNMENT currently has no plans for the withdrawal of tax relief on life assurance premiums, Mr. Peter Rees, Minister of State at the Treasury, has assured the life assurance industry.

This was revealed yesterday by Mr. Leonard Hall, chairman of the LOA, at a Press conference to review the 1979 results and discuss the current state of the UK life assurance industry.

As part of its overall review of the present tax allowances system, the Government has been considering the possibility of ending life assurance tax relief. This has been given for over 100 years.

The LOA, the Associated Scottish Life Offices, and the Industrial Life Offices Association jointly urged the Treasury to continue the relief, arguing that it encouraged families to look after themselves, and that life assurance played a valuable role in the long-term contractual savings market.

Streat Will

Sir Edward Raymon Streat, chairman of the Cotton Broad from 1940 to 1957, who died last September, aged 82, left £73,109 gross (£72,755 net), in his will published yesterday.

The industry would need at least one year's notice of any change in the rate of relief — currently 17.1 per cent — Mr. Hall said yesterday.

Late institutional demand leads to strong equity close Gilts retrieve early falls and Gods substantially up

Account Dealing Dates
Options
*First Declared Last Account
Dealings Close Dealings Day
Jan. 14 Jan. 24 Jan. 25 Feb. 4
Jan. 28 Feb. 7 Feb. 8 Feb. 18
Feb. 11 Feb. 21 Feb. 22 Mar. 3
* "New time" dealings may take
place from 9.30 a.m. two business days
earlier.

All three main investment
sections of stock markets yesterday
closed on a firm to strong
note, after a drab earlier session
relieved mostly by renewed
strength in Gold shares on the
sharply higher oil price.
Continued weakness was evident
in Food retailers following Asda
supermarket's move to intensify
the High Street price war, but
early double-figure falls were
reduced to negligible proportions
by the close.

A mid-afternoon burst of
institutional interest for good-
quality industrial equity dealers
unwavered and values quickly
regained losses, which had
mirrored uncertainty about the
steel situation, and finished
several pence higher on the
session. The upturn was accom-
panied by stock shortages. As a
result, the FT 30-share index
closed 10.4 up on the day at 484.0
after having recorded a loss of
1.6 at 10.00 a.m.

Secondary Oils were active
again and regained initial losses,
which were sometimes substan-
tial because of profit-taking and
with gains stretching to 18 pence.
Leading Electricals and other
companies which could benefit
from any increase in defence
spending were particularly
sought after.

The late turn for the better
was not confined to the equity
sectors. Gilts edged securities
fully participated and reclaimed
falls extending to 2, largely a
reflection of late selling the
previous evening to close a net
1.1 higher. Once again, the
recently-exhausted Government
tap stock, Treasury 12 1/2 per cent
A, 2000-05, was a principal
mover and fell to 223 in its 223-
paid form before rallying to
close at 224 for a net rise of 1.

Similarly, losses of 1 among
the shorts were eventually trans-
formed into gains of 4 and the
overall firmness was continuing
after the official close.

South African Golds basked in
the limelight of the rising bullion
price and registered substantial
gains despite meeting late profit-
taking. The FT Gold Mines
index, which had slipped 13.7 on
Monday, rebounded 20.4 to 324.6,
this compares with its 1979-80
high of 380.4 recorded earlier
this month.

Demand for Traded options
increased and 1,022 deals were
arranged, which compares with

619 on Monday. Racial were
active with 245 trades, while oil
issues also attracted. Useful
business with BP and Shell
recording 114 and 151 contracts
respectively.

Hambros good

A firm banking sector was
featured by Hambros which
jumped 16 to 322 in response
to Press comment. Kleinwort
Benson also reflected a Press
mention with a rise of 4 to 144p.
The major clearing banks
attracted renewed support ahead
of the dividend season which
starts next month. NatWest,
figures due on February 28, rose
9 to 365p but, still accompanied
by suggestions that the bank
might launch a fresh American
bid following the recent success-
ful placing of its shareholdings in
Standard Chartered and
Sedgwick Forbes, Midland closed
a further 10 to the good at 370p.
Elsewhere, news that the U.S.
Comptroller of the Currency
has given the go-ahead for the
group's controversial \$140m
takeover of Marine Midland
helped Hongkong and Shanghai
put on 7 to 102p.

With the exception of C. E.
Heath, down 5 to 210p, Lloyd's
brokers made progress in Insur-
ances. On the Marsh and
McLennan situation, Heath rose
4 to 149p, while H. W. Rob-
ertson improved 3 to 105p
and Stenhouse edged forward a
couple of pence to 80p.

Initial losses in the drinks
sector were generally reversed
following a late institutional
buying. Allied, a weak market
of late, closed 2 better at 77p.
Selected regional issues en-
countered support: Vaux added
4 to 137p, while Morlanne put on
6 to 103p, the latter after favour-
able Press comment.

In Buildings, Blue Circle
firmed 12 to 288p in anticipation
of increases in the price of
cement. Anglo-Siam, the
subject of a bid from the former,
added 4 to 96p to match the
current worth of the share
exchange offer. Elsewhere, YOC
put on 2 to 160p in a limited
movement in response to the re-
cently announced three-for-two
scrip issue. In Timbers, specu-
lative interest was directed
towards Montague L. Meyer
which put on 8 to 88p.

Although trading in ICI was
thin, the shares remained sensi-
tive to buyers and firmed 9 to
389p. Fisons added 6 to 293p.
Among other Chemicals, Leigh
interests attracted fresh interest
and put on 12 to 123p, but Bils
and Everard, 21 1/2 p, gave back
4 of the previous day's gain of
12 that followed the better-than-
expected interim statement. Up
3 1/2 on Monday, Bernard Wardle
jumped a further 5 1/2 to 34p on
the announcement that Birm-
-

ham and Midland Counties Trust
intends to offer 33p per share
cash.

Henderson-Kenton weak

Stores were featured by sharp
falls in Henderson-Kenton and
Roskill following sharply lower
first-half profits; the former
closed 17 down at 98p, after 97p,
while the latter fell 6 to 22p,
after 21p. Cansers "A" gave
up 5 to 35p on further considera-
tion of the failed half-year
profits, but Fortminster rose 8 to
142p on demand in a thin
market. Lee Cooper added 7 to
242p for a similar reason. Still
reflecting the increased stake
taken in the group by Berger
Jenson, A. G. Stanley put on 4
to 71p.

Late institutional support
lifted Lescage 12 to 204p, while
Dowry, interim results due dur-
ing this Account, rallied from an
earlier 172p to end a net 2 off
at 175p. Flight Refuelling
closed to respond to speculative
interest and rose 11 to 229p.
Among Motor Distributors,
Caffrys jumped 19 to 165p fol-
lowing renewed takeover gossip,
while support was also seen for
Tate of Leeds, 3 up at 83p and
for T. C. Harrison, 5 better at
67p.

Leading Newspapers made
useful headway in the later busi-
ness. News International improved
8 to 176p, as did Associated,
at 288p, the latter being helped
by the chairman's annual state-
ment and a property revaluation. Daily
Mail A closed 21 higher at 503p.
Among secondary issues specu-
lative interest in a thin market
again bolstered Eucalyptus Pulp,
which advanced 15 for a two-
day gain of 28 to 125p.

Properties attracted a useful
demand which extended into the
late evening and gains in the
leaders stretched to 11p. Land
Securities added that much, to
298p, while MEPC and Great
Portland Estates firmed 7 apiece
to 191p and 229p respectively.
Elsewhere, Mountview Estates
attracted speculative support and
put on 12 to 129p, while Dejan,
interim statement today, firmed
6 to 130p, Bradford improved 5
to 160p, after 156p, in response
to Press comment. Fresh con-
sideration of the recent rally
lifted McKay Securities 10 to
150p in a thin market, while
Allied London added 5 to 97p
and Perry Bolton 10 to 220p.

Oil shares enjoyed another
active trade following the further
pounce of price increases. British
Petroleum, a relatively subdued
market of late, came to life and
pushed ahead to close around the
day's best with a gain of 20 at
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Comment on increased competi-
tion exerted fresh selling
pressure on Food Retailers, but
buyers at the lower levels prompt-
ed a strong rally which left
quotations little altered on bal-
ance. Associated Dairies touched
186p before setting just a couple
of pence cheaper on balance at
176p; the half-yearly statement
is due today. Competitors J.
Sainsbury reverted to the over-
night level of 298p, after 290p.
Smiths Industries added 8 to
222p on hopes of increased de-
pendence spending. Prestige added
5 to 148p on the results and Hunt-
leigh found support at 79p, up
from 75p, after 154p. Elsewhere,
speculative support lifted Robert-
son 5 to 132p and Barker and
Dibson 1 1/2 for a two-day gain of
3 1/2 to 323p. Glass Govey were
marked up to 58p in initial re-

sponse to the annual results and
property revaluation but closed
unchanged on balance at 54p.
Single put on 2 to 171p in the
sympathetic Decca closed 20 higher
at 385p and the "A" 15 to the good
at 350p. Elsewhere in the
leaders, GEC were also lively
and closed 6 firmer at 369p, while
fresh support lifted Plessey 4 to
131p.

Leading Engineers followed
the general trend, the bulk of
the day's improvement taking
place in the afternoon trading.
Helped by continuing hopes of
increased defence spending, the
Vickers were noteworthy for
rise of 8 at 136p. GKN improved
6 to 272p and Hawker 4 to 192p.
Interest in secondary issues was
at a relatively low ebb. News of
the £18.7m contract for a tanker
and steel plant in the Far East
prompted a sympathetic im-
provement of 10 to 176p in
Bowler. Glaxo rose 8 to 490p
and Boots improved 6 to 180p as
did Unilever, to 468p. Elsewhere,

Reed Int. pleases

Miscellaneous industrial leaders
closed at the day's best with
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